



1/51

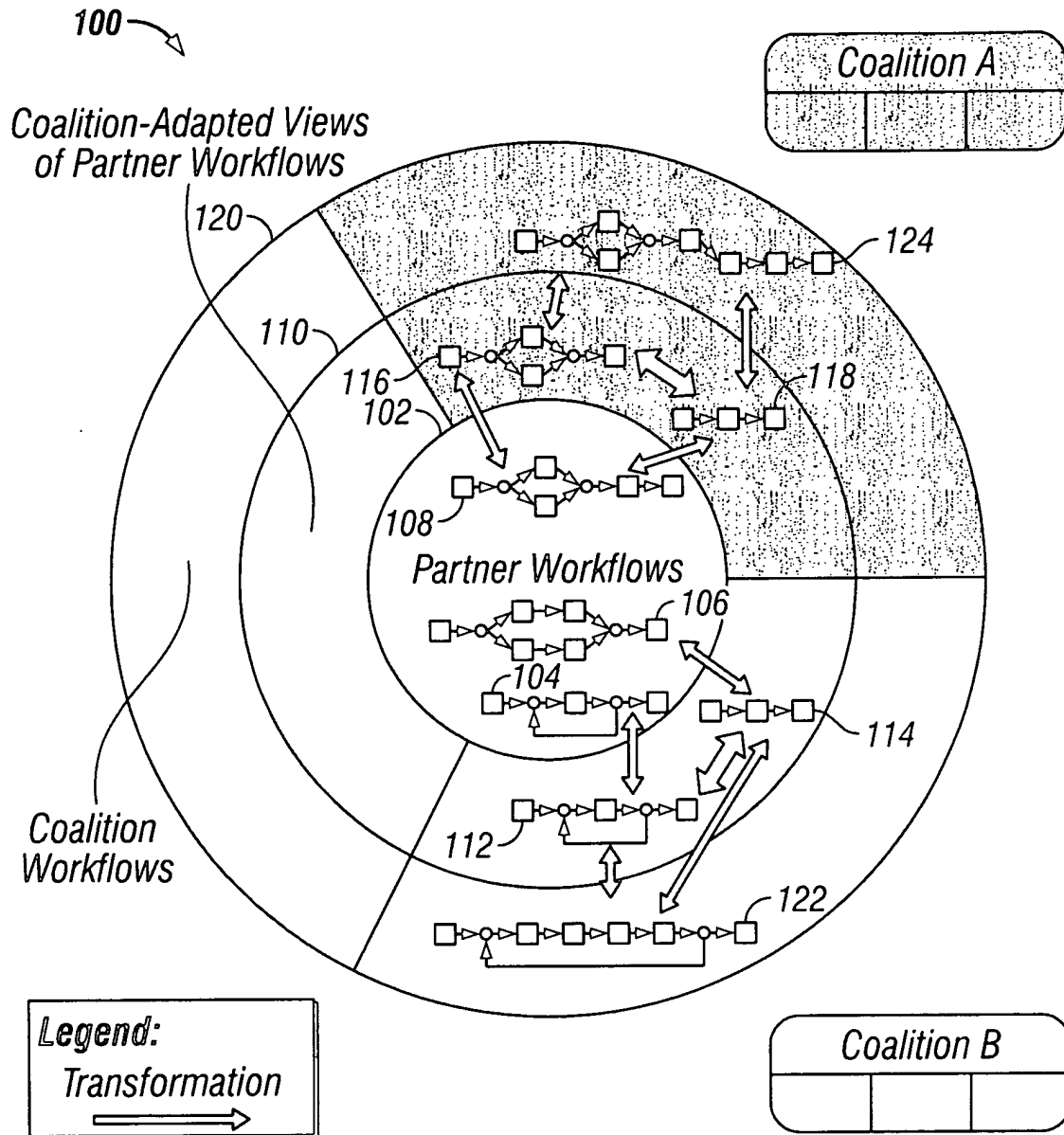


FIG. 1

2/51

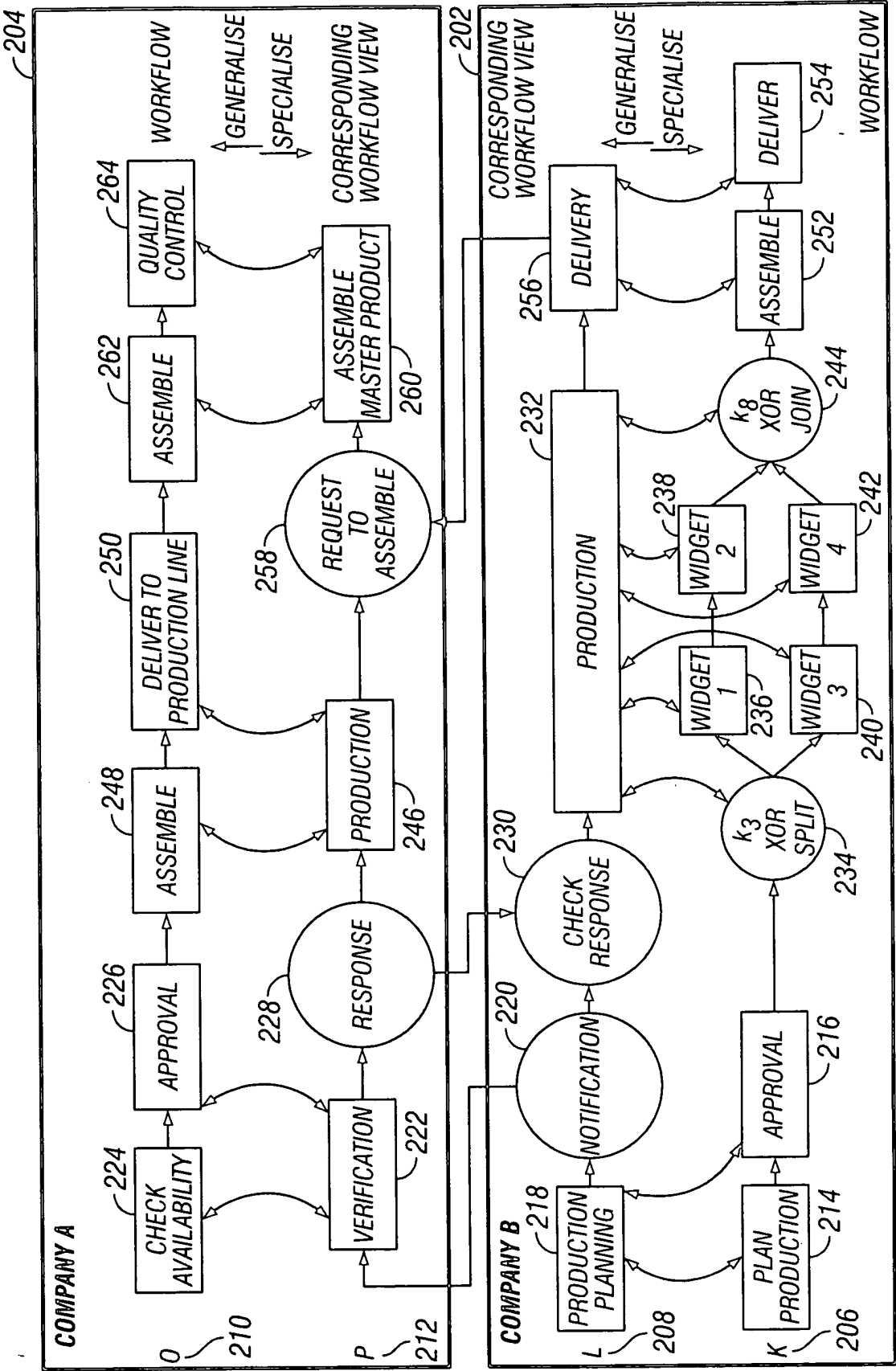
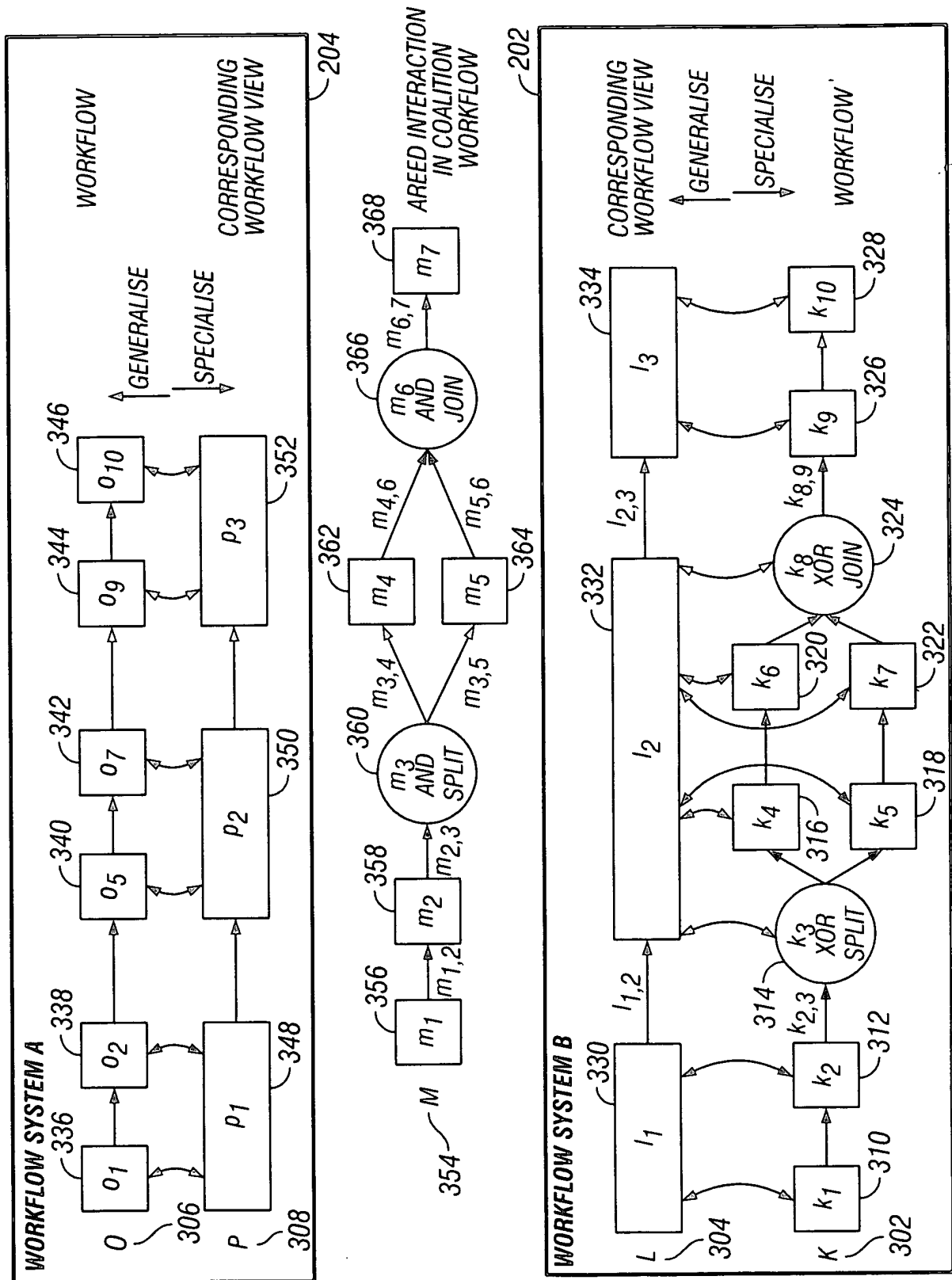


FIG. 2

3/51

FIG. 3



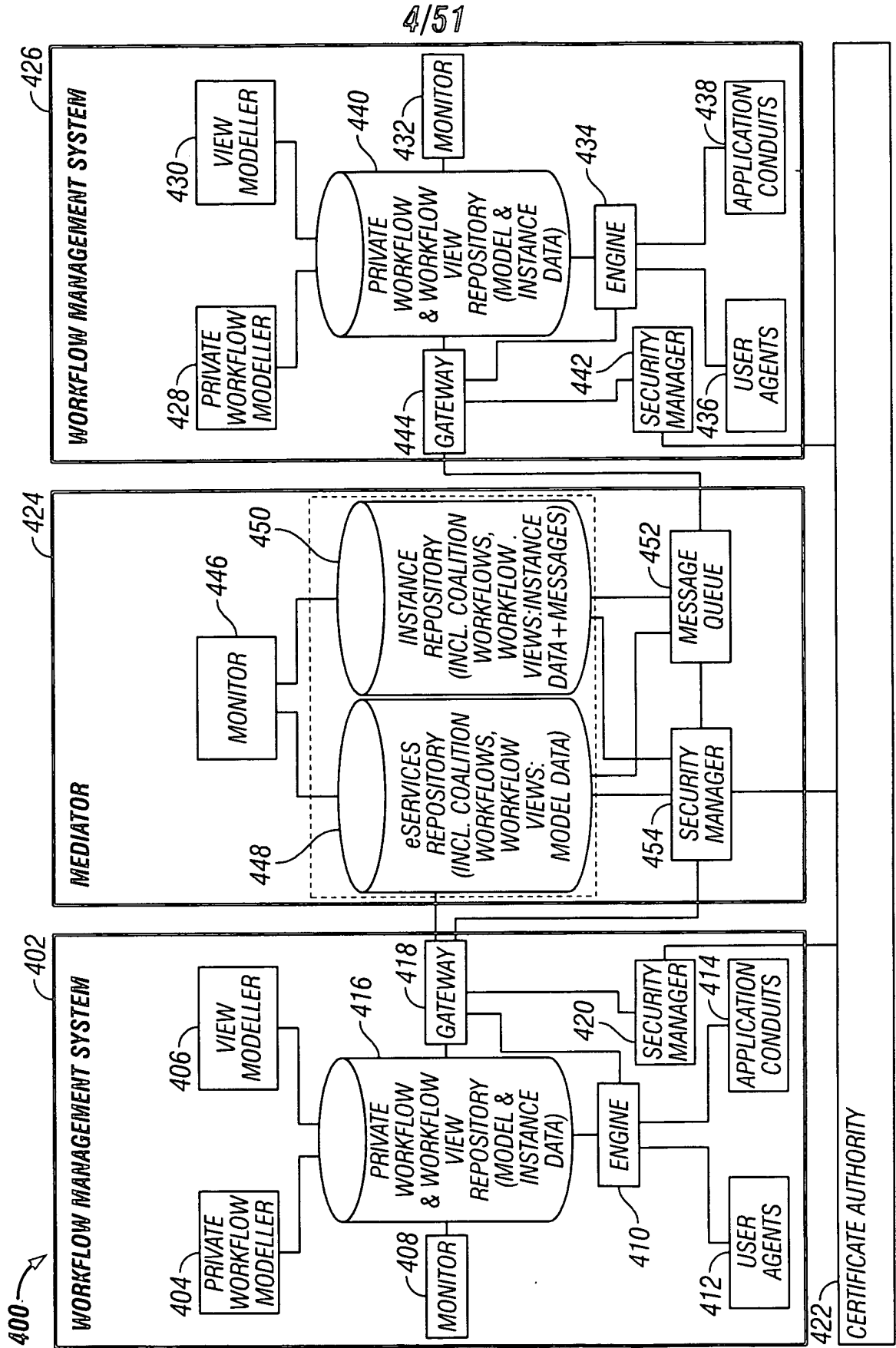


FIG. 4

5/51

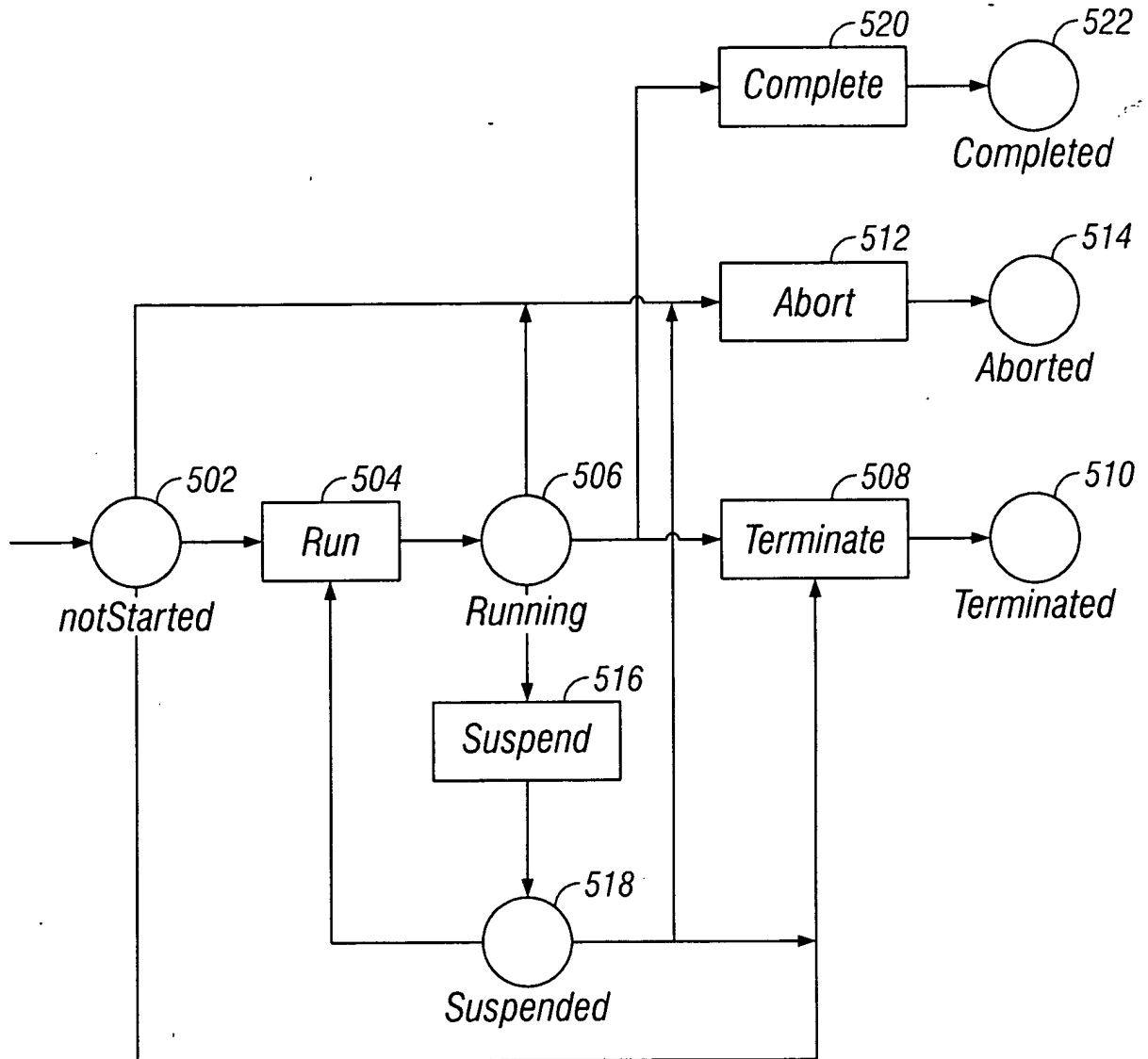


FIG. 5

6/51

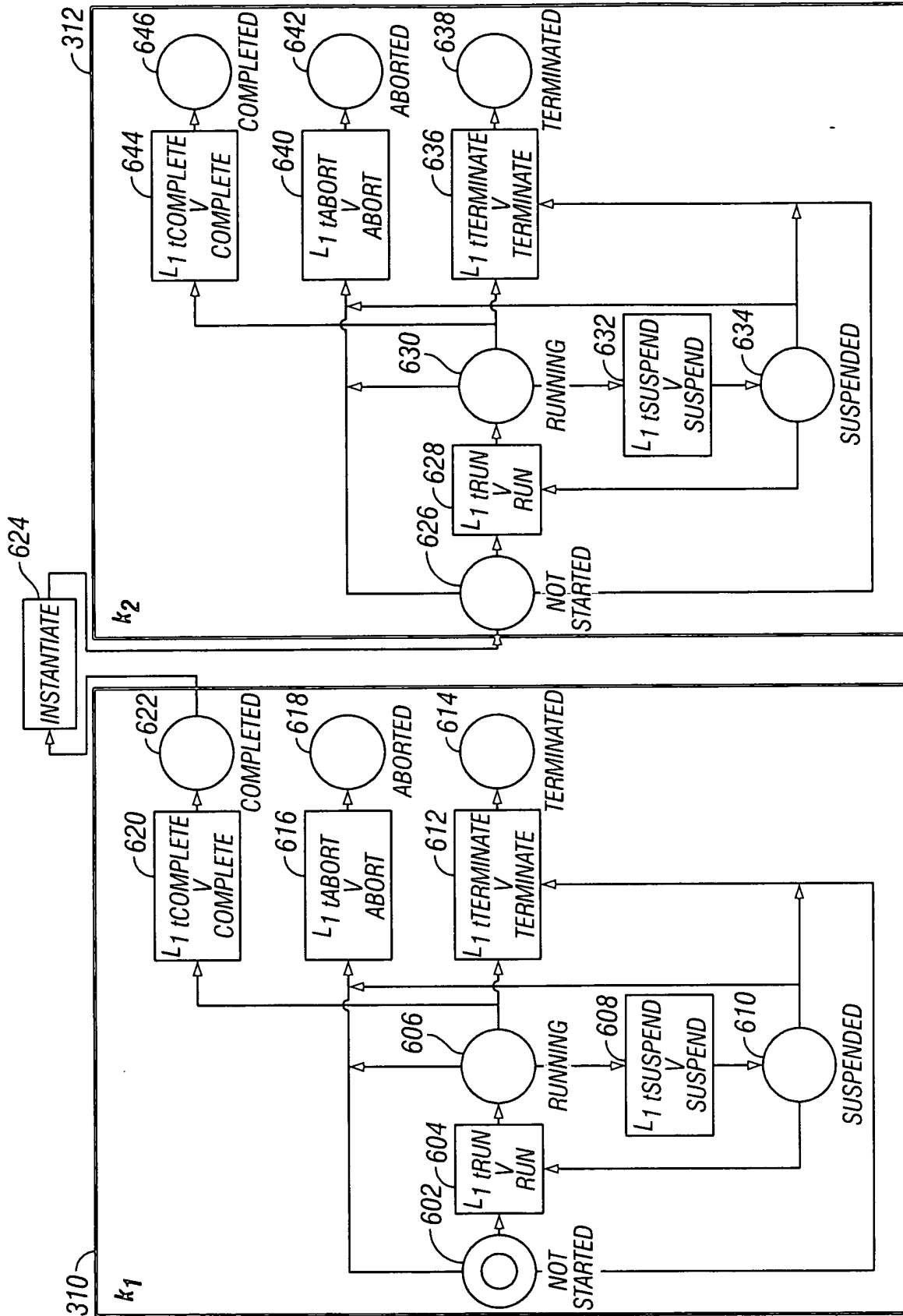
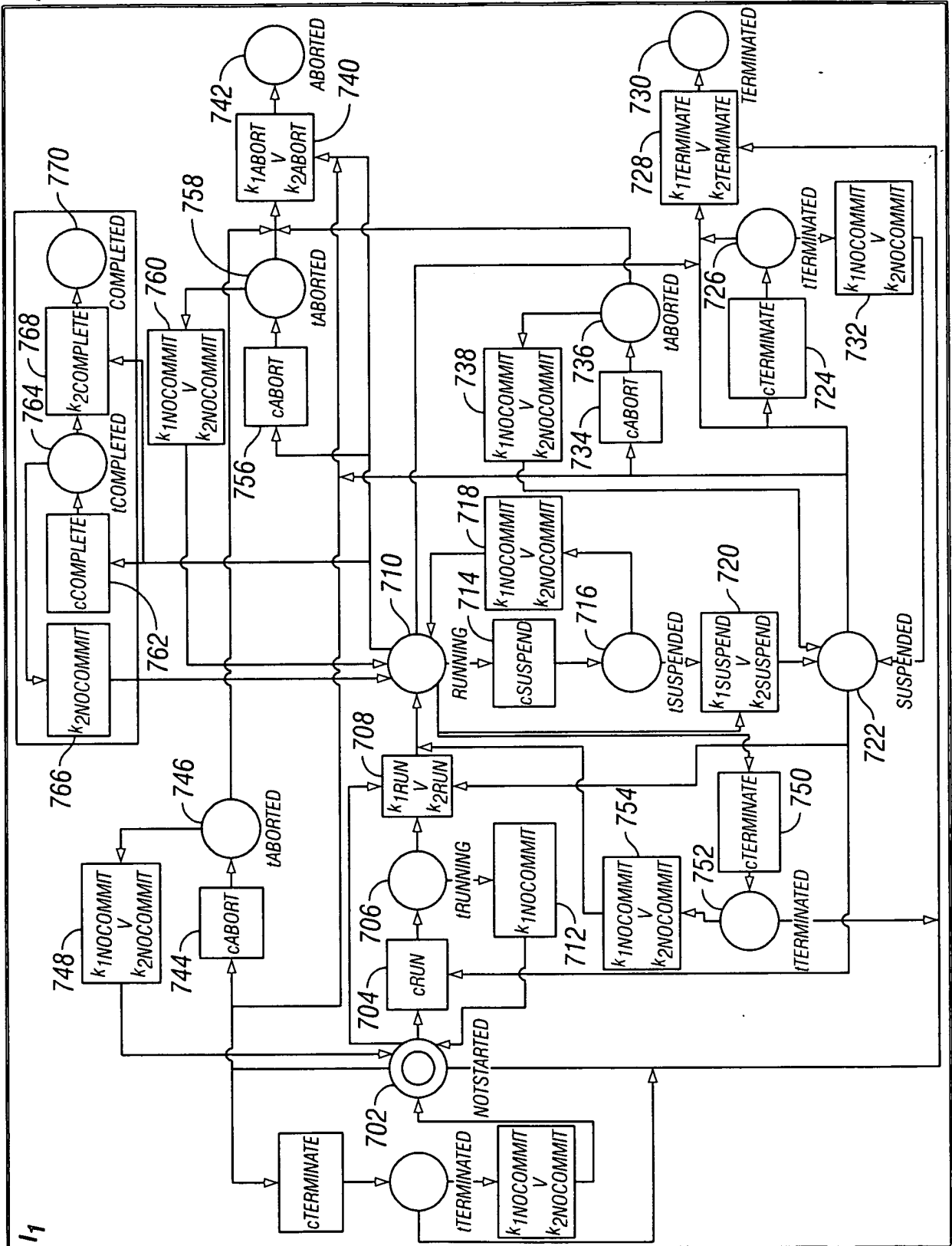


FIG. 6

7/51

FIG. 7

330



8/51

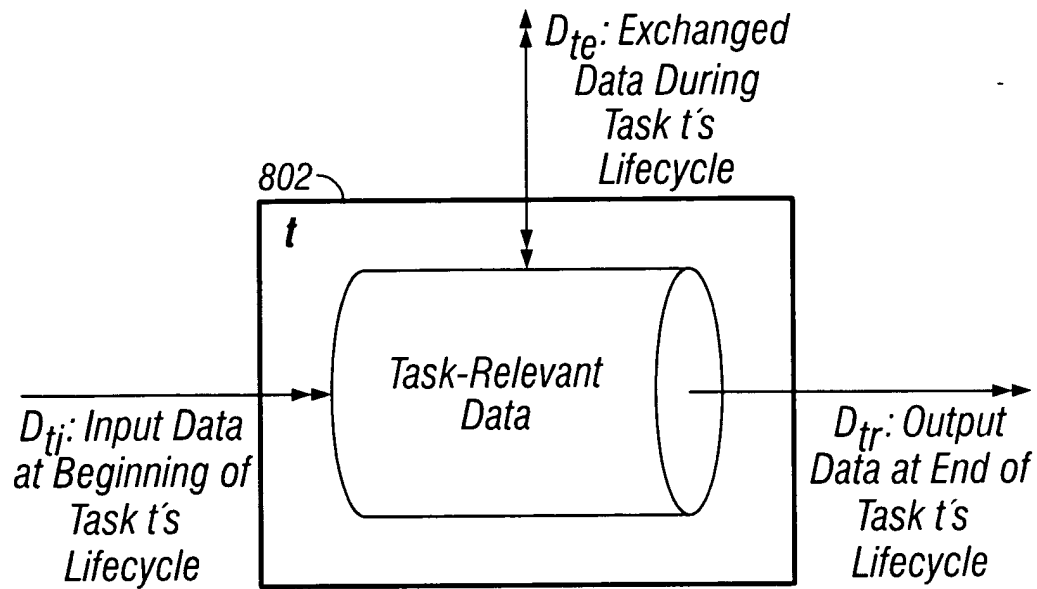


FIG. 8

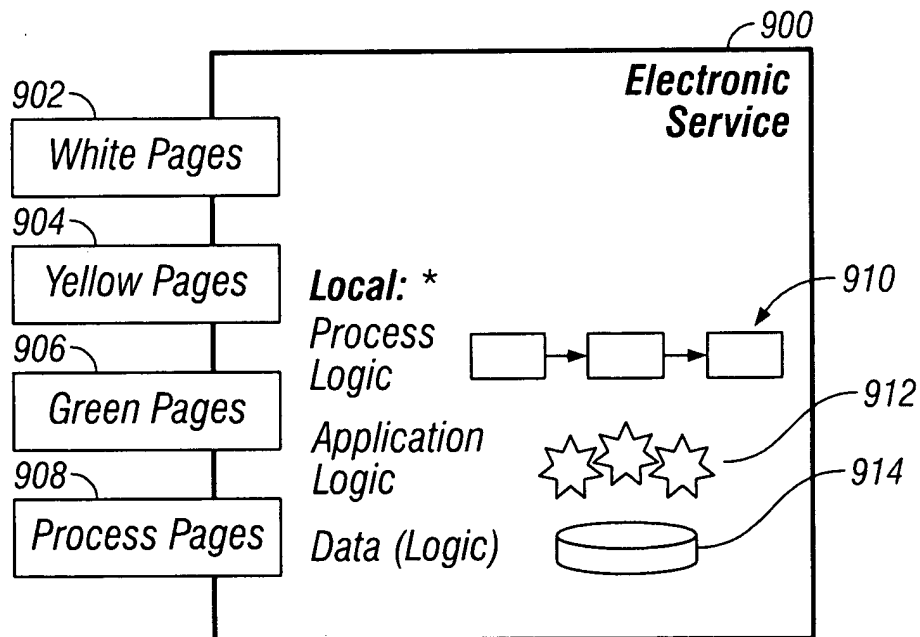


FIG. 9

9/51

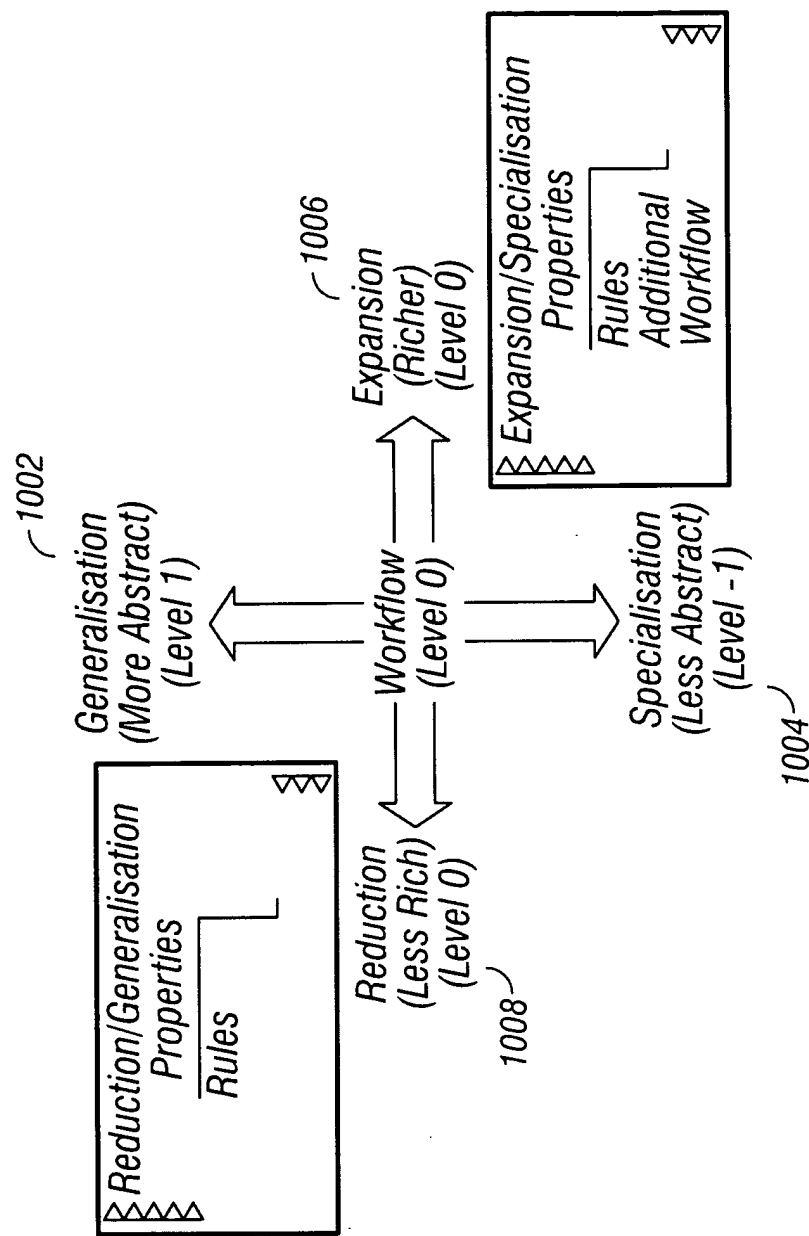


FIG. 10

10/51

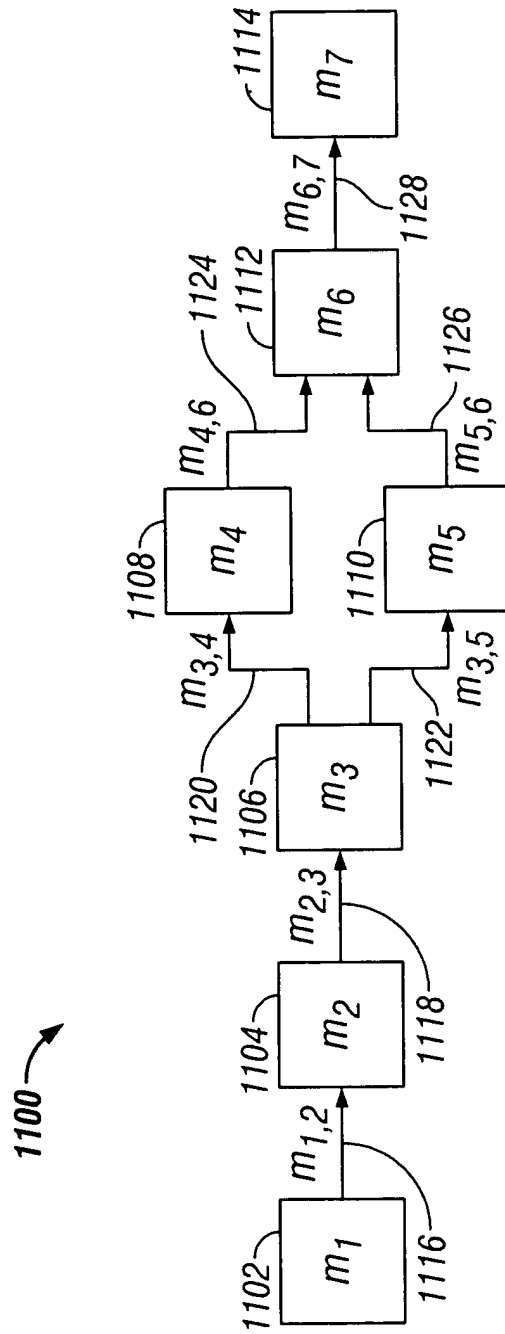


FIG. 11

11/51

Column-Index (j) 1202												1200
Row-Index (i)	1	2	...	l	l+1	...	l+n-1	l+n	...	r-1	r	
1	①											②
2	$m_{1,1}$	$m_{1,2}$	$m_{1,...}$	$m_{1,l}$	0	0	0	$m_{1,l+1}$	$m_{1,...}$	$m_{1,m-1}$	$m_{1,m}$	
...	$m_{2,1}$	$m_{2,2}$	$m_{2,...}$	$m_{2,l}$	0	0	0	$m_{2,l+1}$	$m_{2,...}$	$m_{2,m-1}$	$m_{2,m}$	
l	$m_{...,1}$	$m_{...,2}$	$m_{...,...}$	$m_{...,l}$	0	0	0	$m_{...,l+1}$	$m_{...,...}$	$m_{...,m-1}$	$m_{...,m}$	
l+1	0	0	0	$n_{1,1}$	$n_{1,2}$	$n_{1,...}$	$n_{1,n}$	0	0	0	0	⑤
l+1	0	0	0	$n_{2,1}$	$n_{2,2}$	$n_{2,...}$	$n_{2,n}$	0	0	0	0	
...	0	0	0	$n_{...,1}$	$n_{...,2}$	$n_{...,...}$	$n_{...,n}$	0	0	0	0	
l+n-1	$m_{l,1}$	$m_{l,2}$	$m_{l,...}$	$n_{n,1}$	$n_{n,2}$	$n_{n,...}$	$n_{n,n}$	$m_{l,l+1}$	$m_{l,...}$	$m_{l,m-1}$	$m_{l,m}$	
l+n	⑥											③
l+n	$m_{l+1,1}$	$m_{l+1,2}$	$m_{l+1,...}$	$m_{l+1,l}$	0	0	0	$m_{l+1,l+1}$	$m_{l+1,...}$	$m_{l+1,m-1}$	$m_{l+1,m}$	
...	$m_{...,1}$	$m_{...,2}$	$m_{...,...}$	$m_{...,l}$	0	0	0	$m_{...,l+1}$	$m_{...,...}$	$m_{...,m-1}$	$m_{...,m}$	
r-1	$m_{m-1,1}$	$m_{m-1,2}$	$m_{m-1,...}$	$m_{m-1,l}$	0	0	0	$m_{m-1,l+1}$	$m_{m-1,...}$	$m_{m-1,m-1}$	$m_{m-1,m}$	
r	$m_{m,1}$	$m_{m,2}$	$m_{m,...}$	$m_{m,l}$	0	0	0	$m_{m,l+1}$	$m_{m,...}$	$m_{m,m-1}$	$m_{m,m}$	④
	1206											1208

FIG. 12

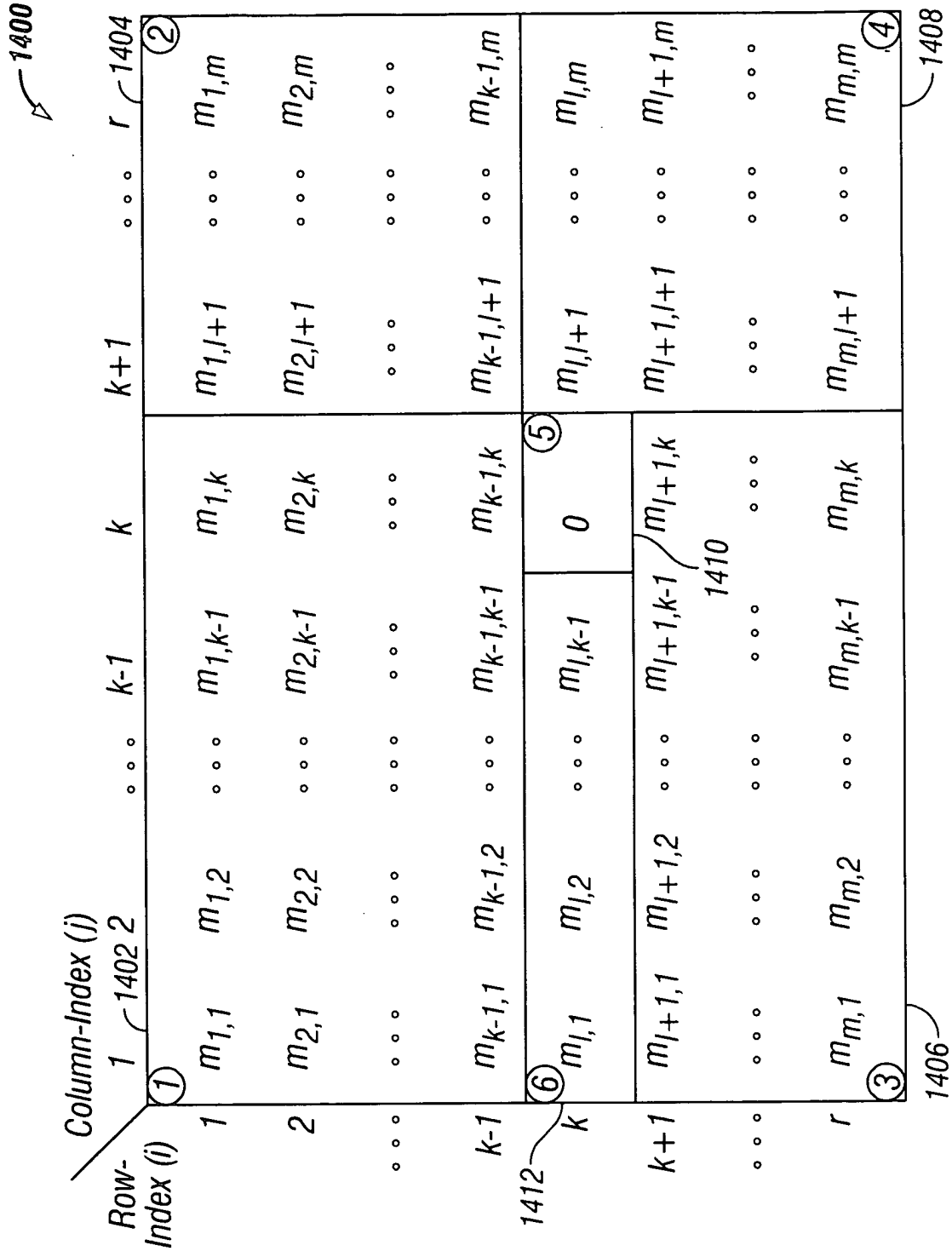
12/51

Row-Index (i)	Column-Index (j)				
	1	2	...	m-1	m
1	$m_{1,1}$	$m_{1,2}$	$m_{1,...}$	$m_{1,m-1}$	$m_{1,m}$
2	$m_{2,1}$	$m_{2,2}$	$m_{2,...}$	$m_{2,m-1}$	$m_{2,m}$
...	$m_{...,1}$	$m_{...,2}$	$m_{...,...}$	$m_{...,m-1}$	$m_{...,m}$
l	$m_{l,1}$	$m_{l,2}$	$m_{l,...}$	$m_{l,m-1}$	$m_{l,m}$
...	$m_{...,1}$	$m_{...,2}$	$m_{...,...}$	$m_{...,m-1}$	$m_{...,m}$
m-1	$m_{m-1,1}$	$m_{m-1,2}$	$m_{m-1,...}$	$m_{m-1,m-1}$	$m_{m-1,m}$
m	$m_{m,1}$	$m_{m,2}$	$m_{m,...}$	$m_{m,m-1}$	$m_{m,m}$
m+1	0	0	0	0	0
...	0	0	0	0	0
m+n-1	0	0	0	0	0
m+n	$m_{l,1}$	$m_{l,2}$	$m_{l,...}$	$m_{l,m-1}$	$m_{l,m}$

1	$m_{1,1}$	0	0	0	0
2	$m_{2,1}$	0	0	0	0
...	$m_{...,1}$	0	0	0	0
l	$m_{l,1}$	0	0	0	0
...	$m_{...,1}$	0	0	0	0
m-1	$m_{m-1,1}$	0	0	0	0
m	$m_{m,1}$	0	0	0	0
m+1	$n_{1,1}$	$n_{1,...}$	$n_{1,n-1}$	$n_{1,n}$	$n_{1,n}$
...	$n_{...,1}$	$n_{...,...}$	$n_{...,n-1}$	$n_{...,n}$	$n_{...,n}$
m+n-1	$n_{m-1,1}$	$n_{m-1,...}$	$n_{m-1,n-1}$	$n_{m-1,n}$	$n_{m-1,n}$
m+n	$n_{n,1}$	$n_{n,...}$	$n_{n,n-1}$	$n_{n,n}$	$n_{n,n}$

FIG. 13

13/51



14/51

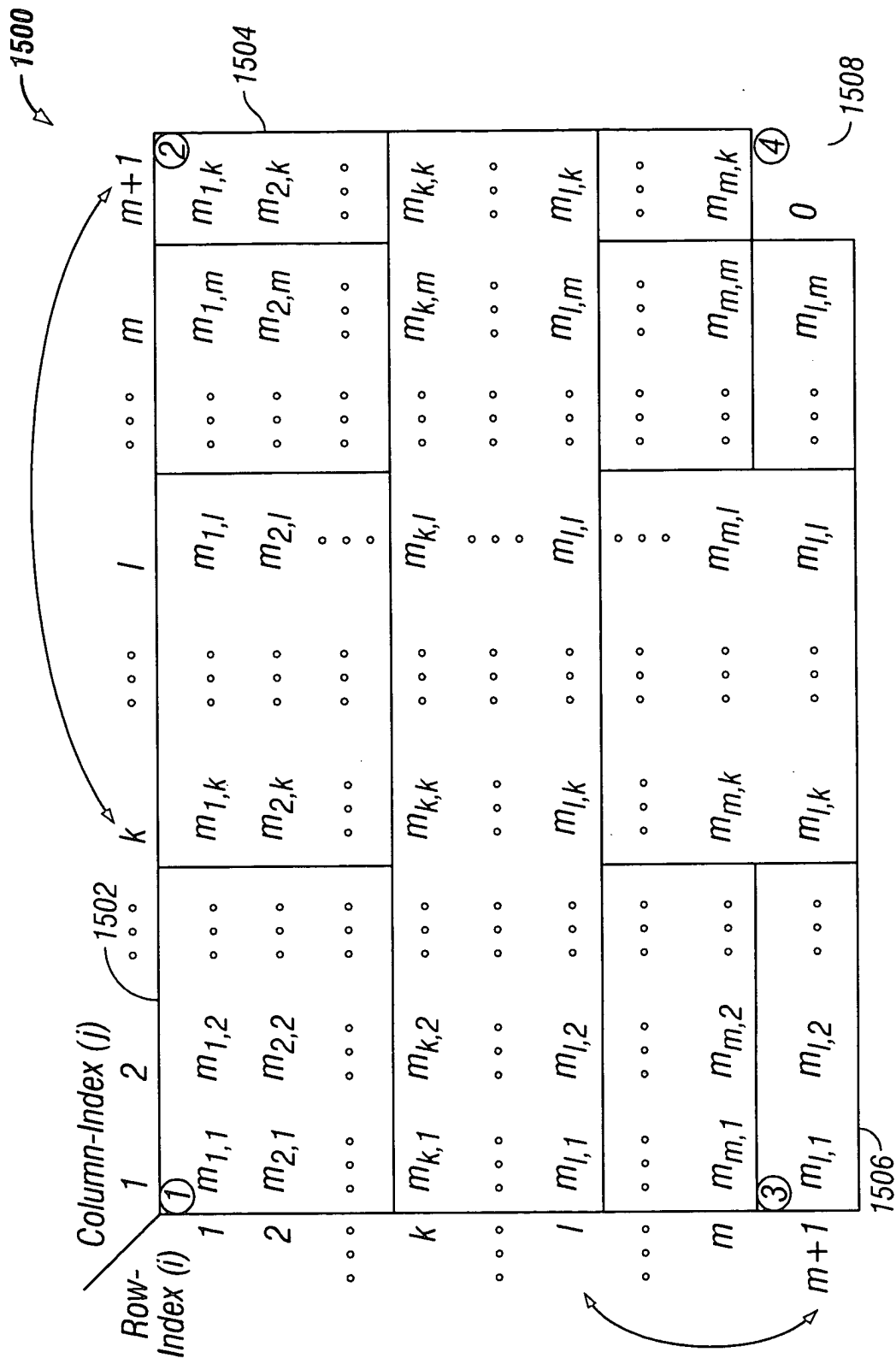


FIG. 15

15/51

Column-Index (j)		1600			
Row-Index (i)	1	...	k-1	k	k+1 ... k+n-1
	1	...	k-1	k	k+n
1	1	...	k-1	k	k+n
...
k-1	k-1	...	k-1,k-1	k-1,k	k-1,k+n
k	k	0	0	n _{1,1}	0
k+1	k+1	0	0	n _{2,1}	0
...
k+n-1	k+n-1	...	m _{l,k-1}	n _{n,1}	...
k+n	k+n	...	m _{l+1,k-1}	0	...
...
r-1	r-1	...	m _{m-1,k-1}	0	...
r	r	...	m _{m,k-1}	0	...
...
1	1	...	m _{1,l+1}	0	...
...
k-1	k-1	...	m _{k-1,l+1}	0	...
k	k	0	n _{1,2}	n _{1,n}	0
k+1	k+1	0	n _{2,2}	n _{2,n}	0
...
k+n-1	k+n-1	...	m _{l,l+1}	n _{n,2}	...
k+n	k+n	...	m _{l+1,l+1}	0	...
...
r-1	r-1	...	m _{m-1,l+1}	0	...
r	r	...	m _{m,l+1}	0	...
...
1	1	...	m _{1,m-1}	m _{1,m}	...
...
k-1	k-1	...	m _{k-1,m-1}	m _{k-1,m}	...
k	k	0	n _{1,n}	n _{1,n}	0
k+1	k+1	0	n _{2,n}	n _{2,n}	0
...
k+n-1	k+n-1	...	m _{l,m-1}	n _{n,n}	...
k+n	k+n	...	m _{l+1,m-1}	0	...
...
r-1	r-1	...	m _{m-1,m-1}	0	...
r	r	...	m _{m,m-1}	0	...
...
1	1	...	m _{1,m}	m _{1,m}	...
...
k-1	k-1	...	m _{k-1,m}	m _{k-1,m}	...
k	k	0	n _{1,n}	n _{1,n}	0
k+1	k+1	0	n _{2,n}	n _{2,n}	0
...
k+n-1	k+n-1	...	m _{l,m}	n _{n,n}	...
k+n	k+n	...	m _{l+1,m}	0	...
...
r-1	r-1	...	m _{m-1,m}	0	...
r	r	...	m _{m,m}	0	...
...

FIG. 16

16/51

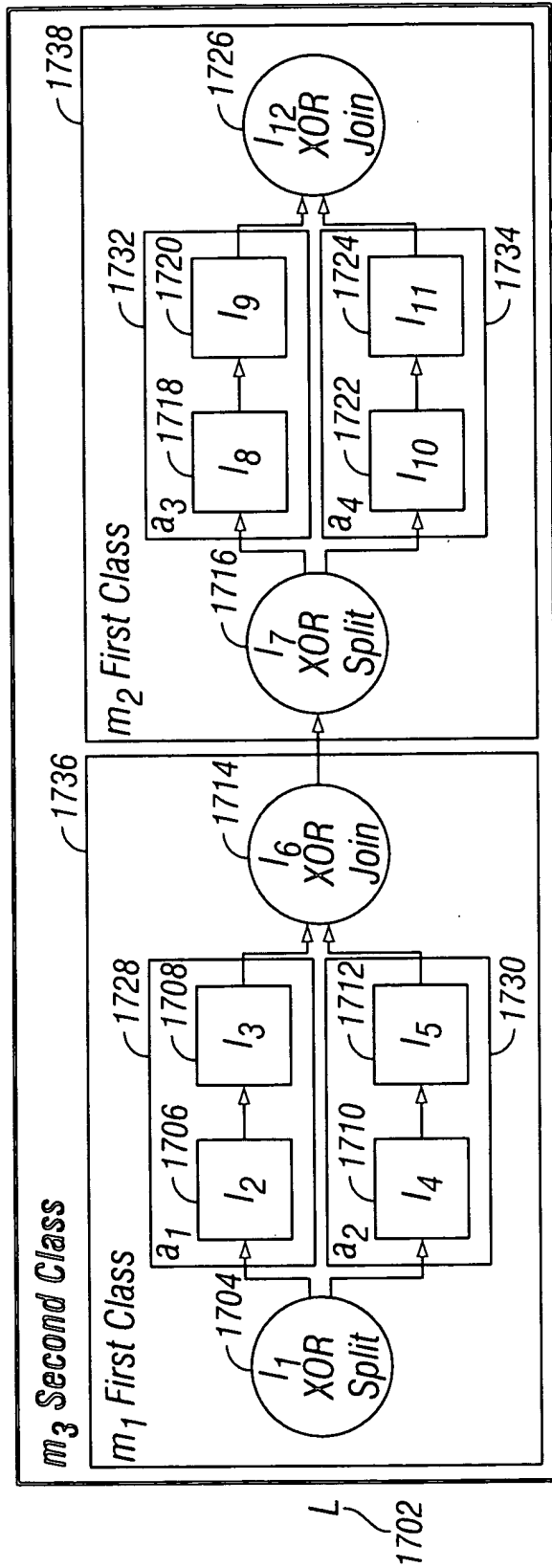


FIG. 17

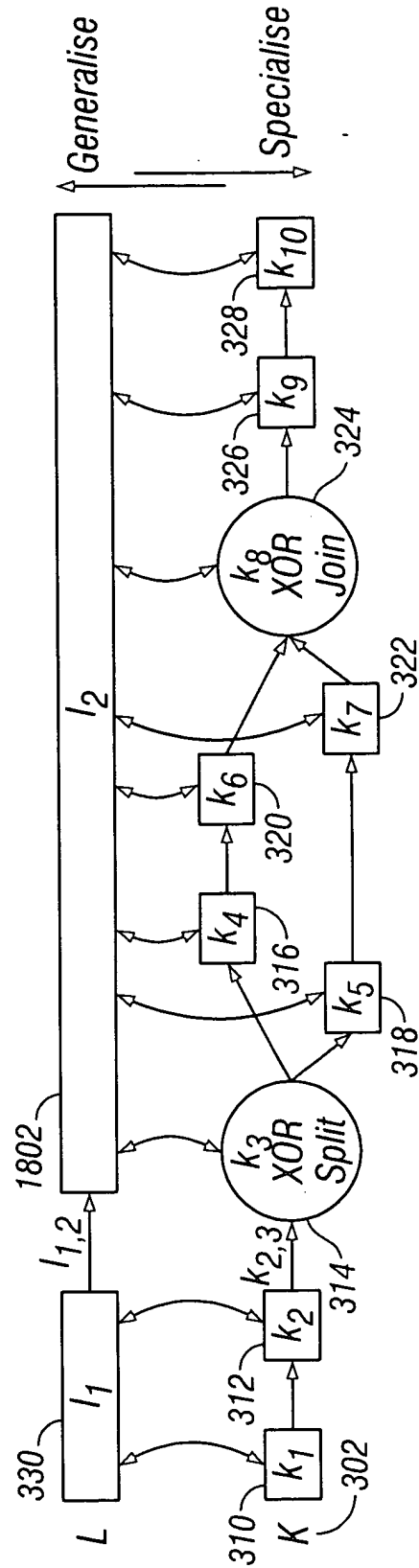


FIG. 18

17/51

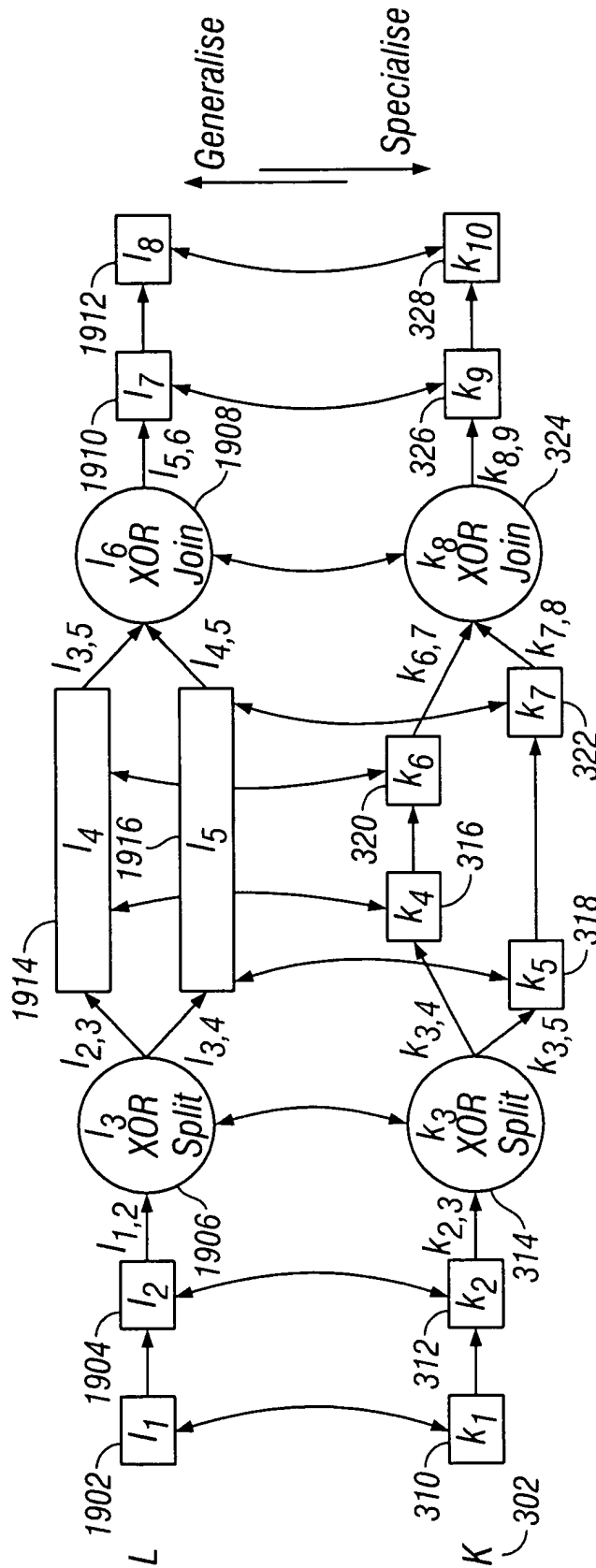
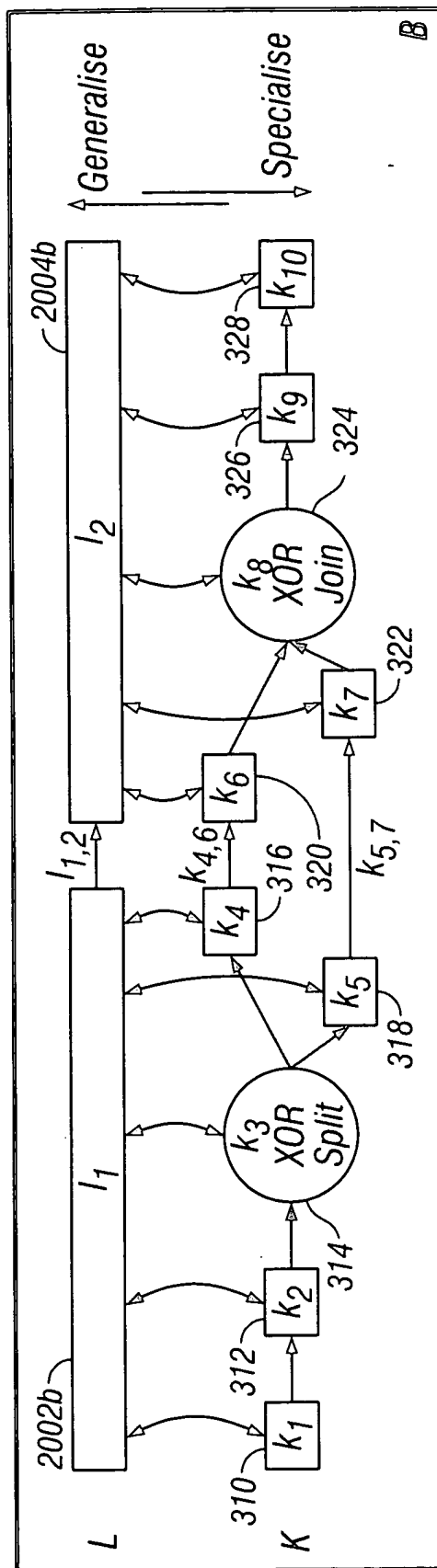
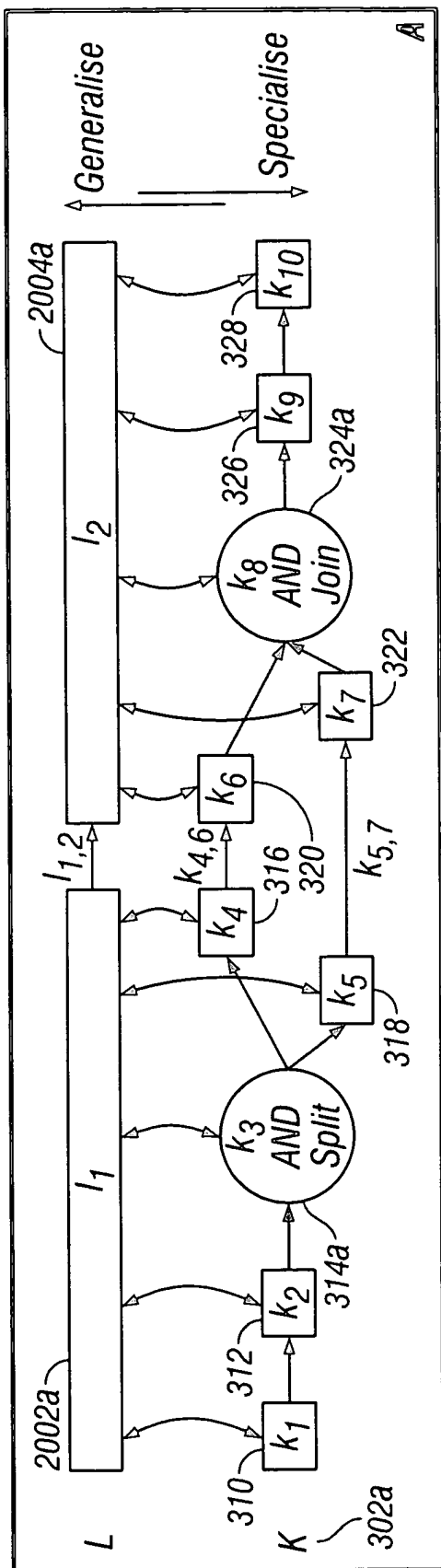


FIG. 19

18/51



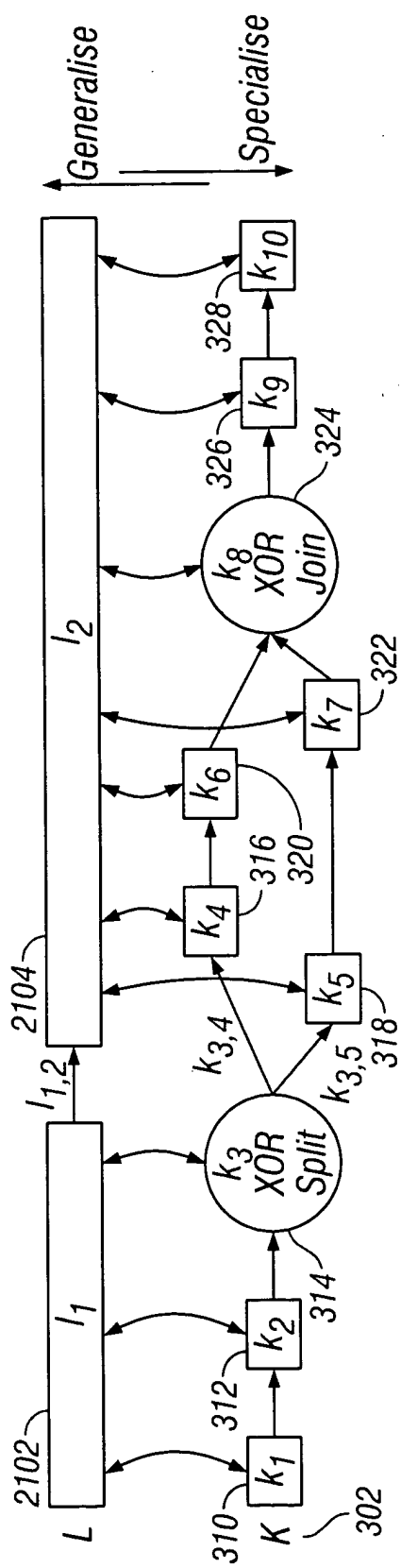
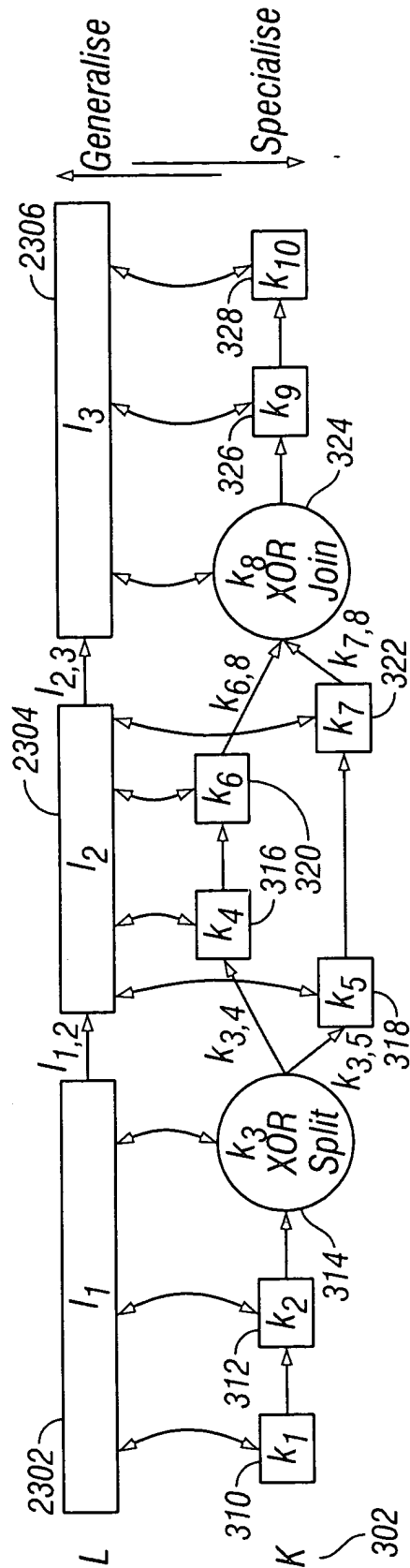
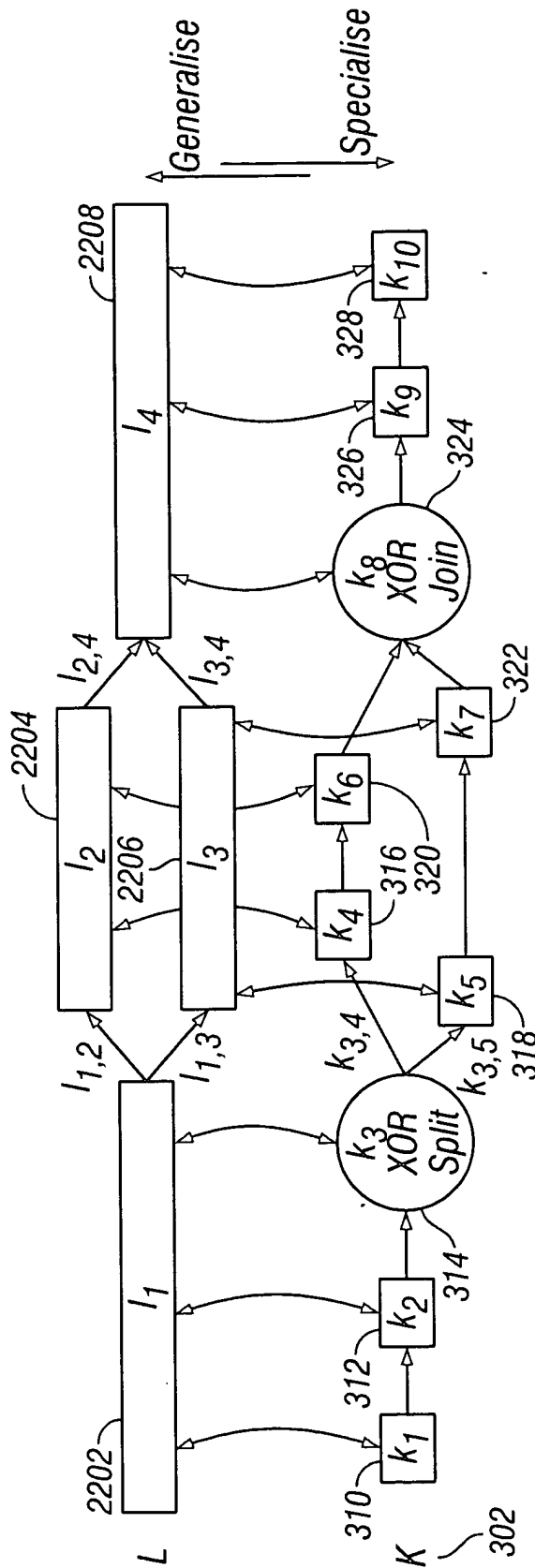


FIG. 21

20/51



21/51

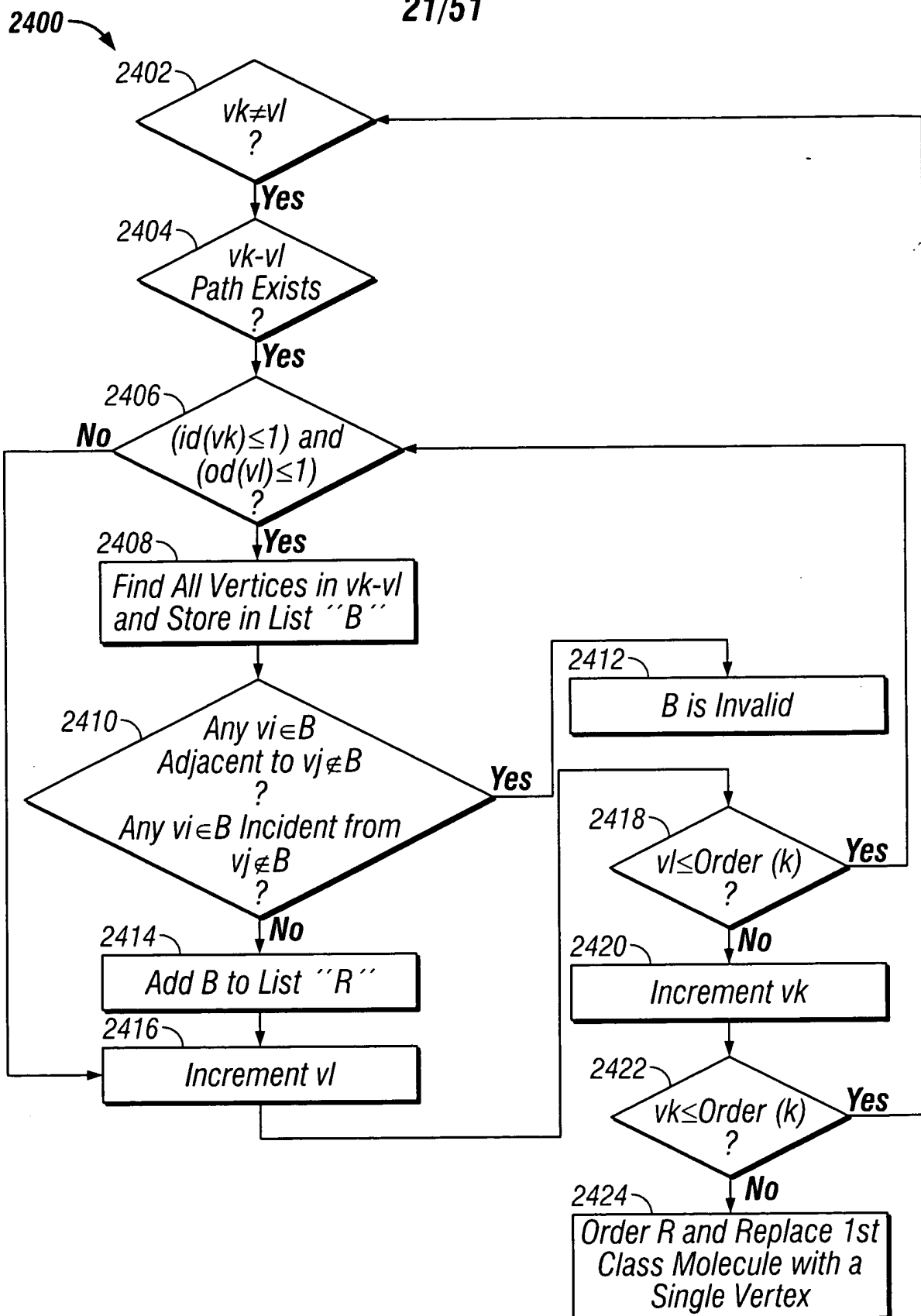


FIG. 24

22/51

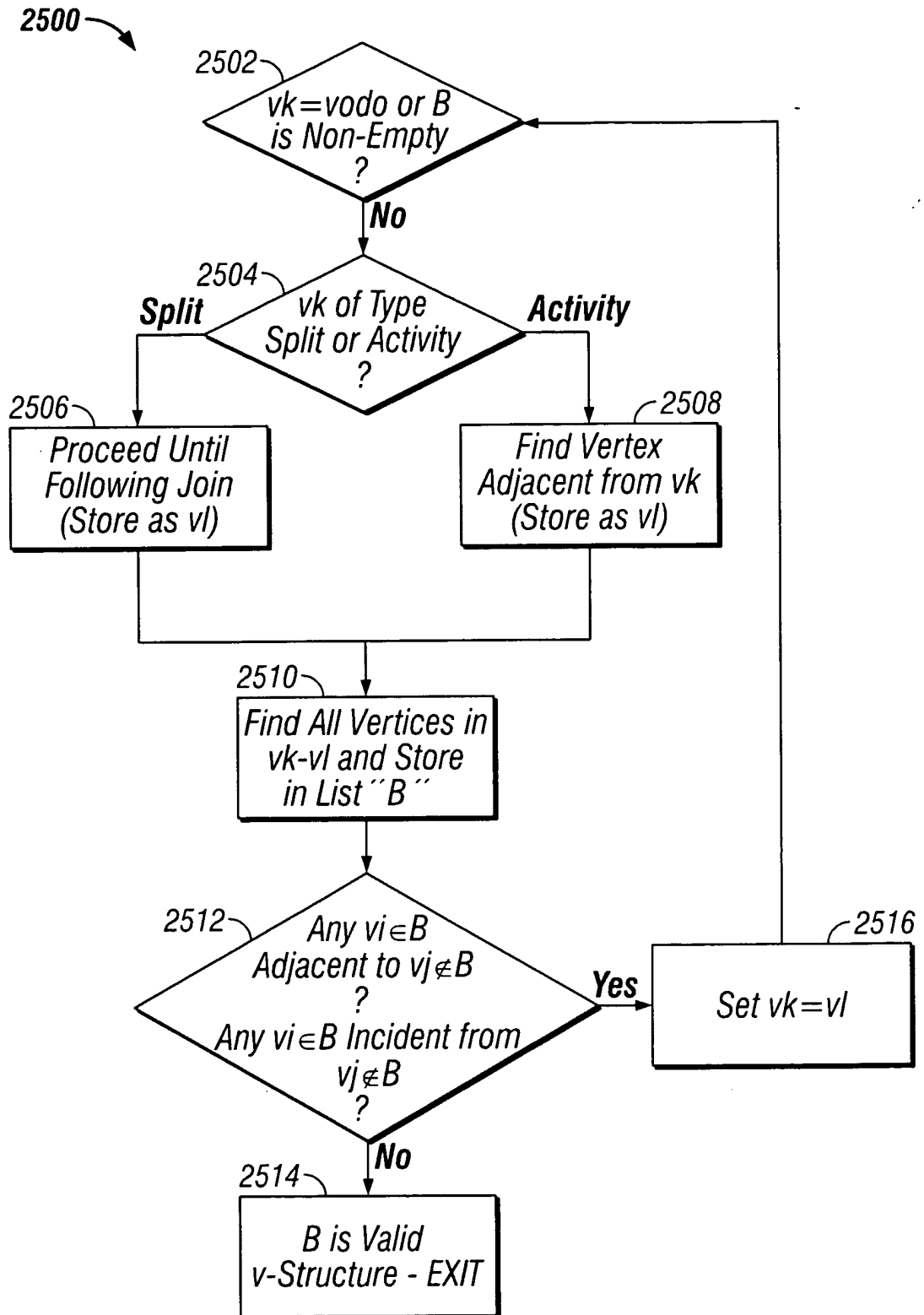


FIG. 25

23/51

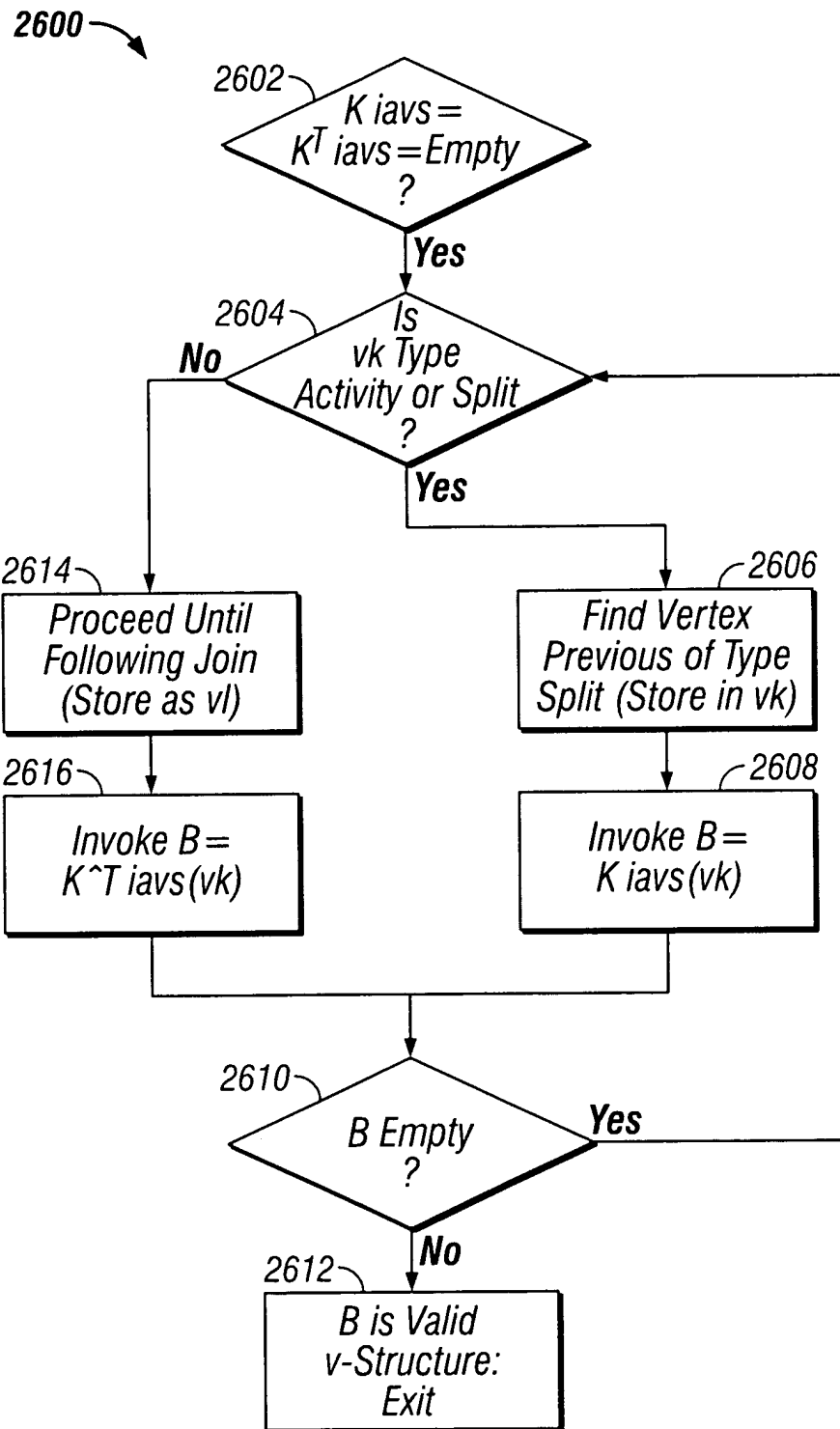
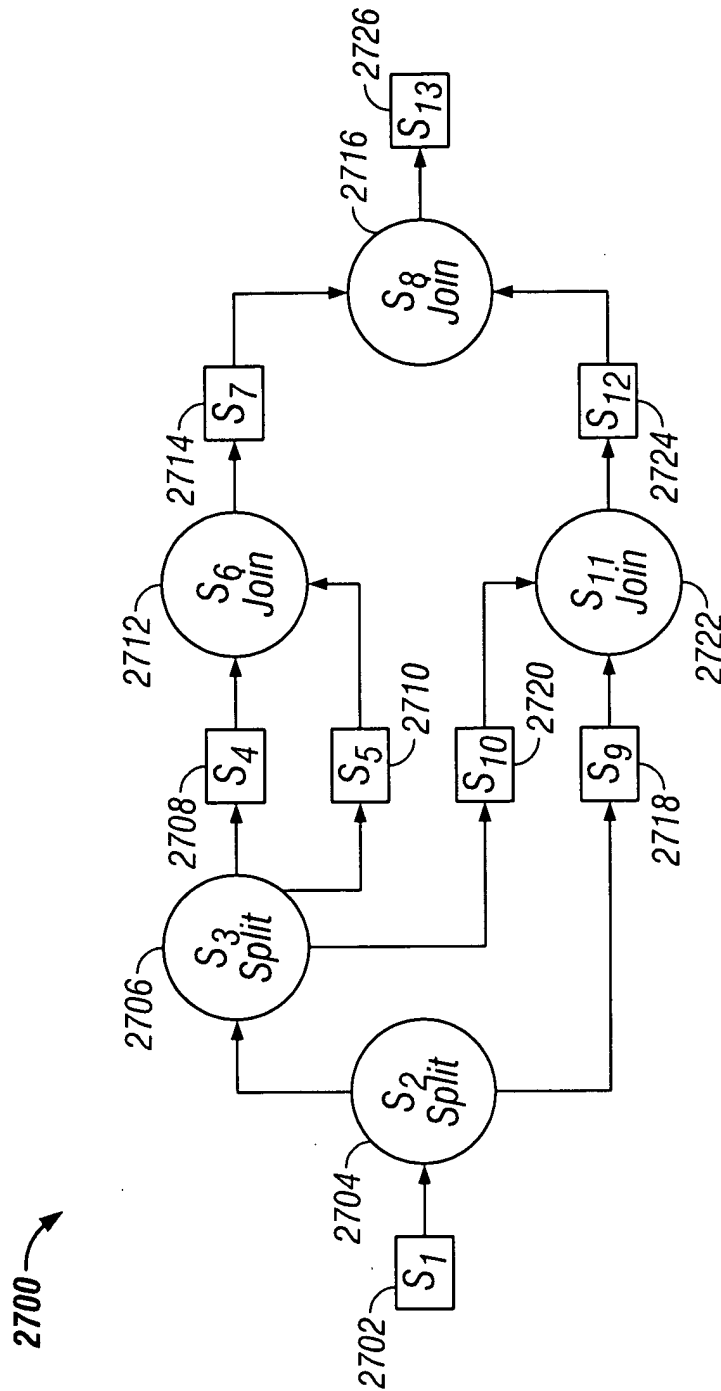


FIG. 26

24/51



25/51

V_k	$S_{\text{IaVS}_Q(V_k)}$
S_1	$\{S_1, S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_2	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_3	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_4	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_5	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_6	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_7	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_8	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_9	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_{10}	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_{11}	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_{12}	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}\}$
S_{13}	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{11}, S_{12}, S_{13}\}$

FIG. 27B

26/51

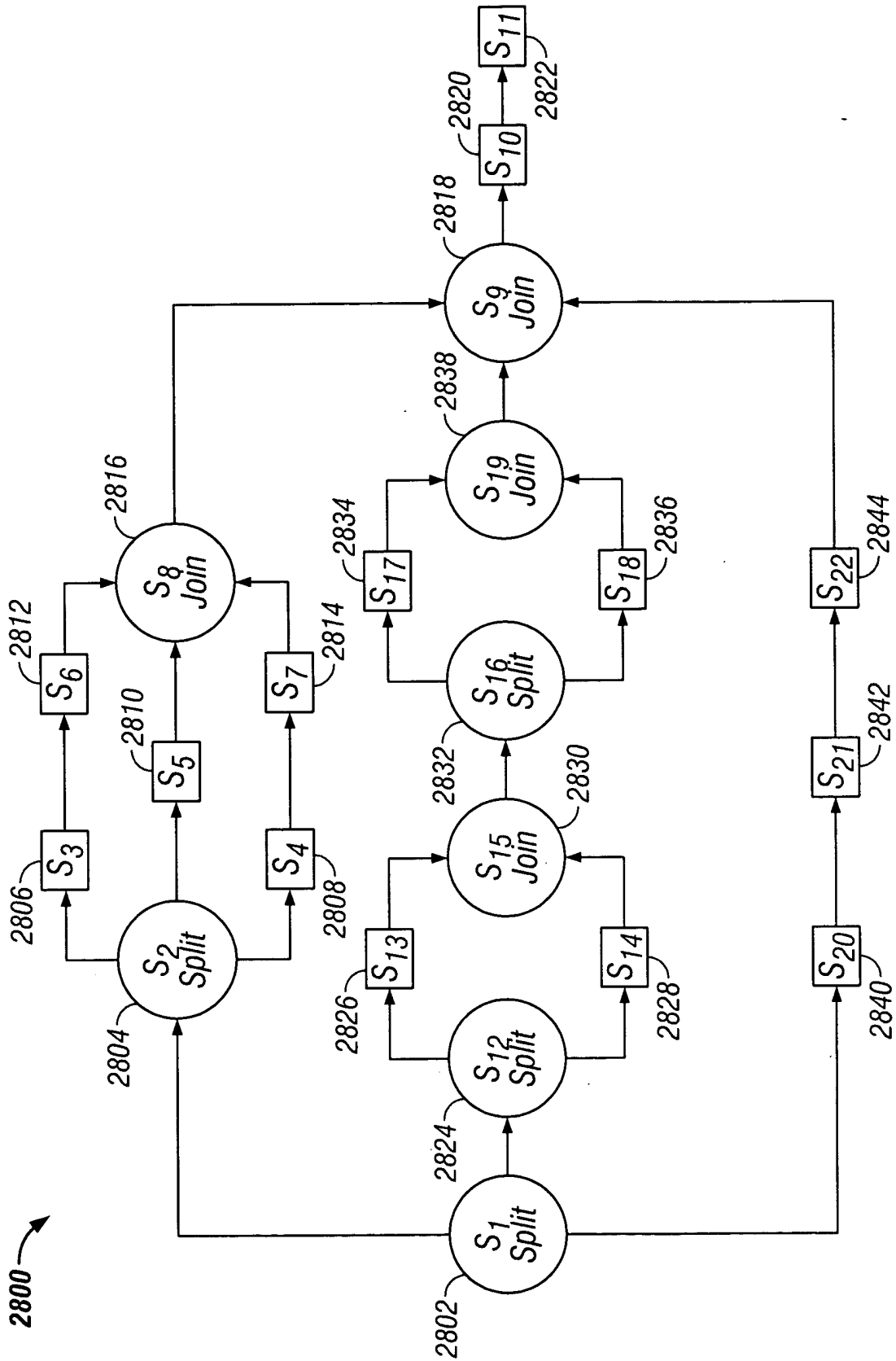


FIG. 28A

27/51

V_k	$S_{12}VS_e(V_k)$
S_1	$\{S_1, S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{12}, S_{13}, S_{14}, S_{15}, S_{16}, S_{17}, S_{18}, S_{19}, S_{20}, S_{21}, S_{22}\}$
S_2	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8\}$
S_3	$\{S_3, S_6\}$
S_4	$\{S_4, S_7\}$
S_5	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8\}$
S_6	$\{S_3, S_6\}$
S_7	$\{S_4, S_7\}$
S_8	$\{S_2, S_3, S_4, S_5, S_6, S_7, S_8\}$
S_9	$\{S_1, S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{12}, S_{13}, S_{14}, S_{15}, S_{16}, S_{17}, S_{18}, S_{19}, S_{20}, S_{21}, S_{22}\}$
S_{10}	$\{S_1, S_2, S_3, S_4, S_5, S_6, S_7, S_8, S_9, S_{10}, S_{12}, S_{13}, S_{14}, S_{15}, S_{16}, S_{17}, S_{18}, S_{19}, S_{20}, S_{21}, S_{22}\},$ $\{S_{10}, S_{11}\}$
S_{11}	$\{S_{10}, S_{11}\}$
S_{12}	$\{S_{12}, S_{13}, S_{14}, S_{15}\}$
S_{13}	$\{S_{12}, S_{13}, S_{14}, S_{15}\}$
S_{14}	$\{S_{12}, S_{13}, S_{14}, S_{15}\}$
S_{15}	$\{S_{12}, S_{13}, S_{14}, S_{15}\}$
S_{16}	$\{S_{16}, S_{17}, S_{18}, S_{19}\}$
S_{17}	$\{S_{16}, S_{17}, S_{18}, S_{19}\}$
S_{18}	$\{S_{16}, S_{17}, S_{18}, S_{19}\}$
S_{19}	$\{S_{16}, S_{17}, S_{18}, S_{19}\}$
S_{20}	$\{S_{20}, S_{21}\}$
S_{21}	$\{S_{20}, S_{21}\}, \{S_{21}, S_{22}\}$
S_{22}	$\{S_{21}, S_{22}\}$

FIG. 28B

28/51

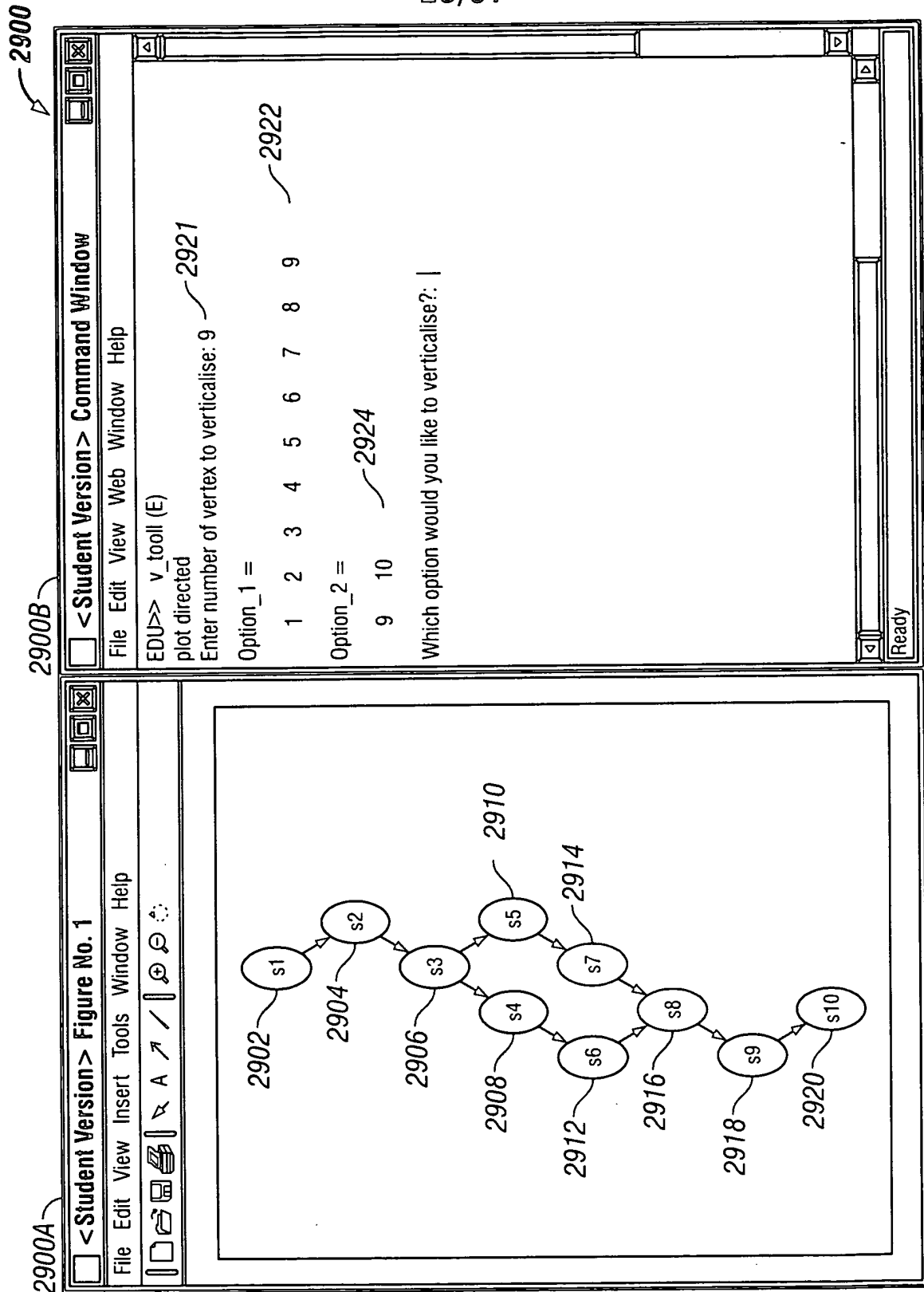


FIG. 29

29/51

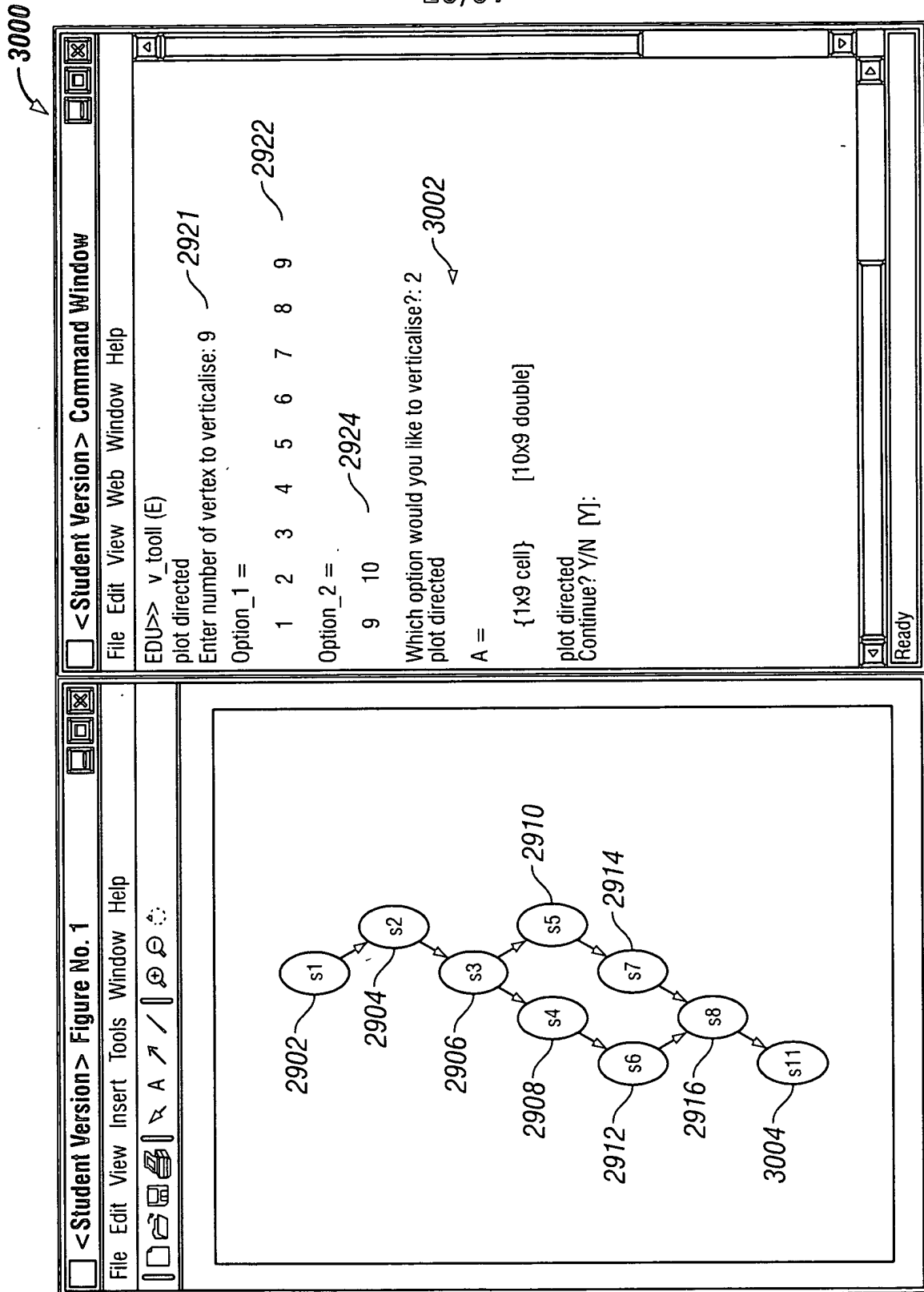


FIG. 30

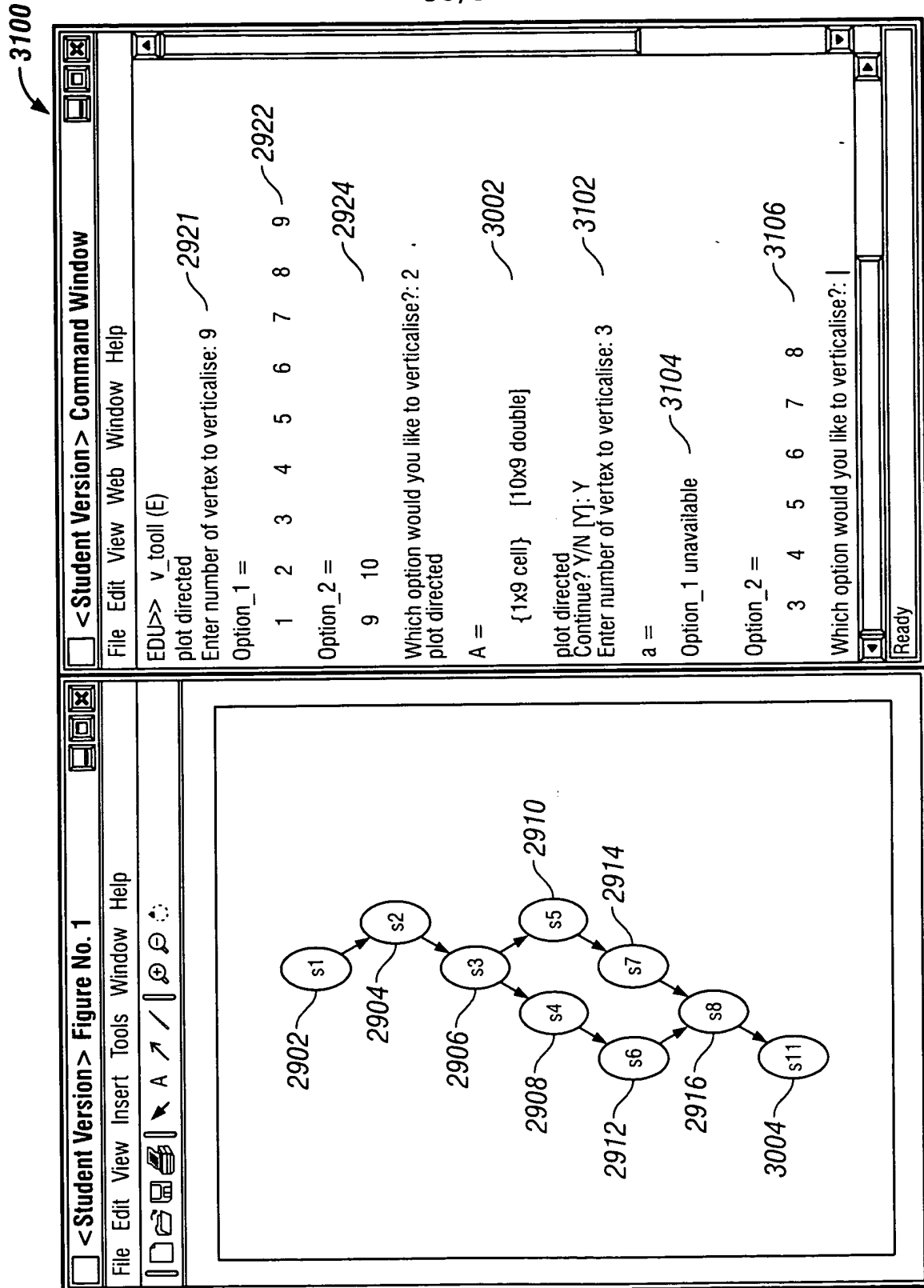


FIG. 31

31/51

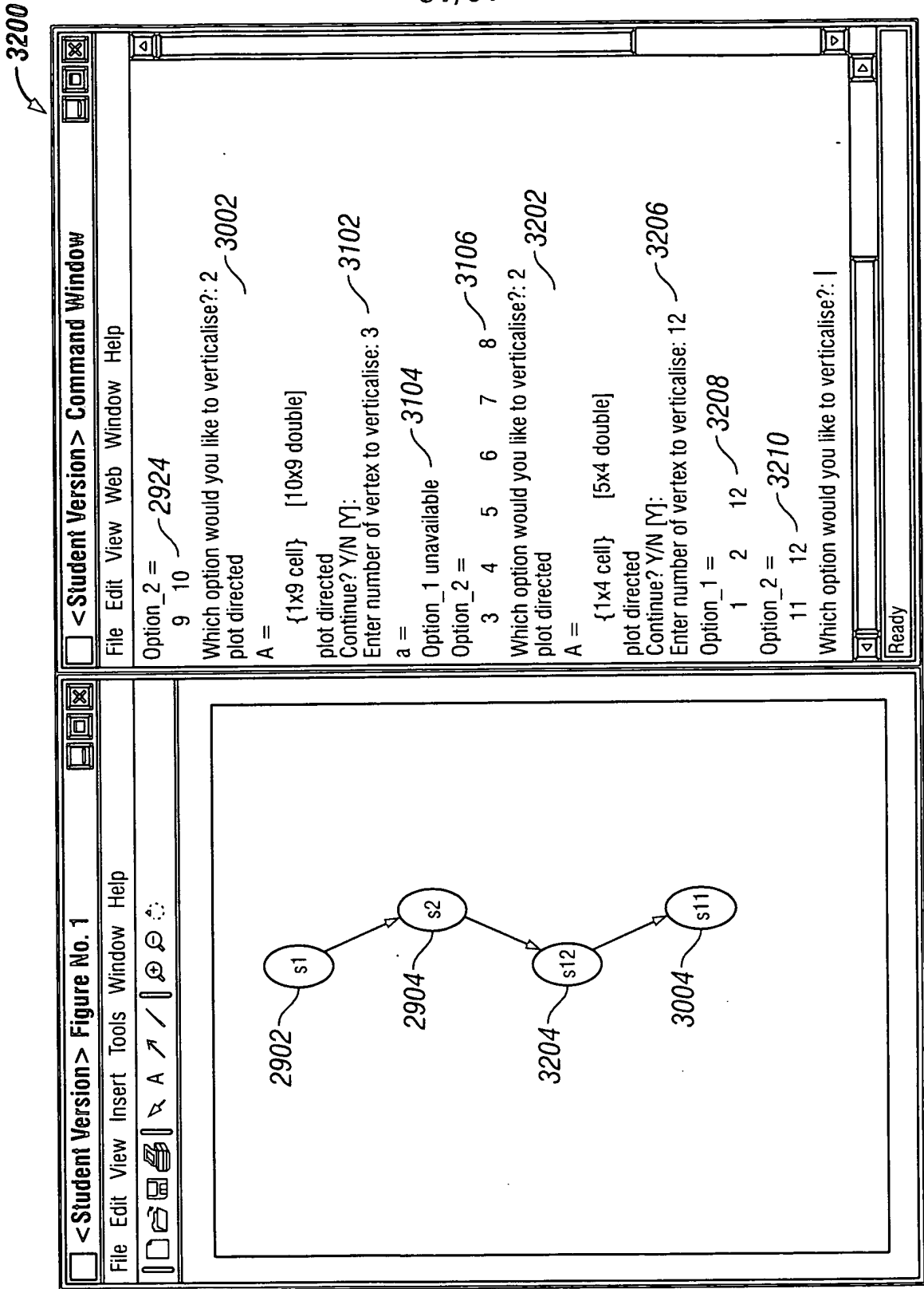


FIG. 32

32/51

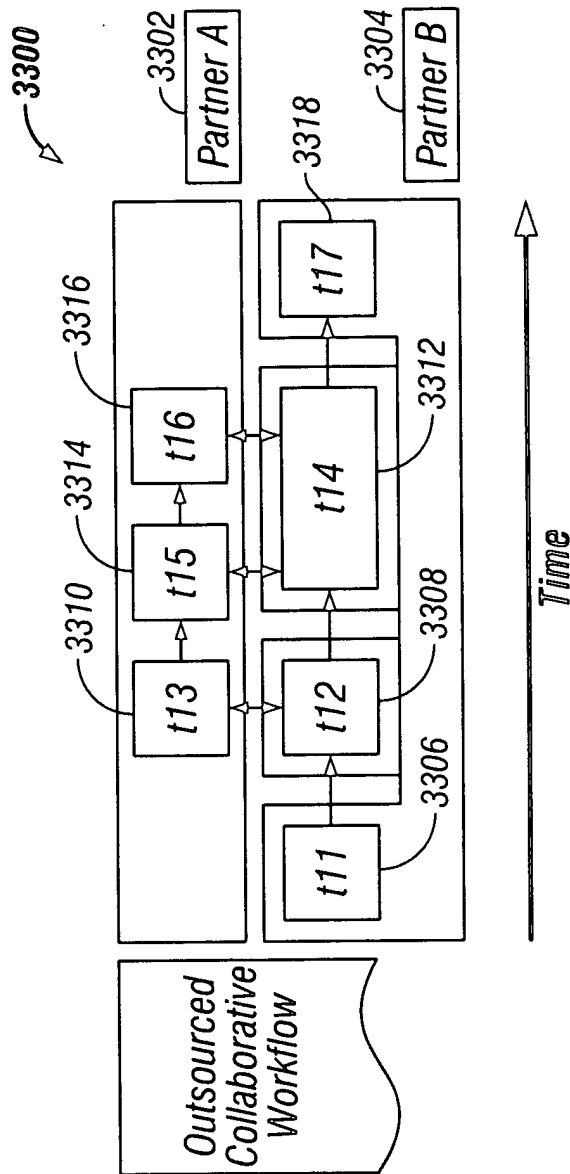


FIG. 33

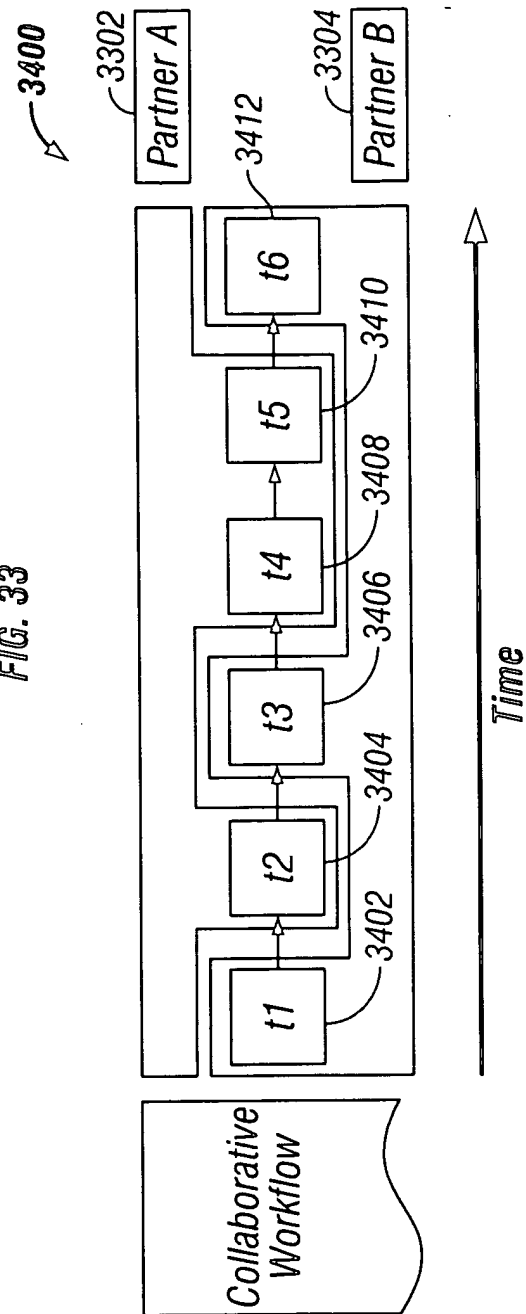


FIG. 34

33/51

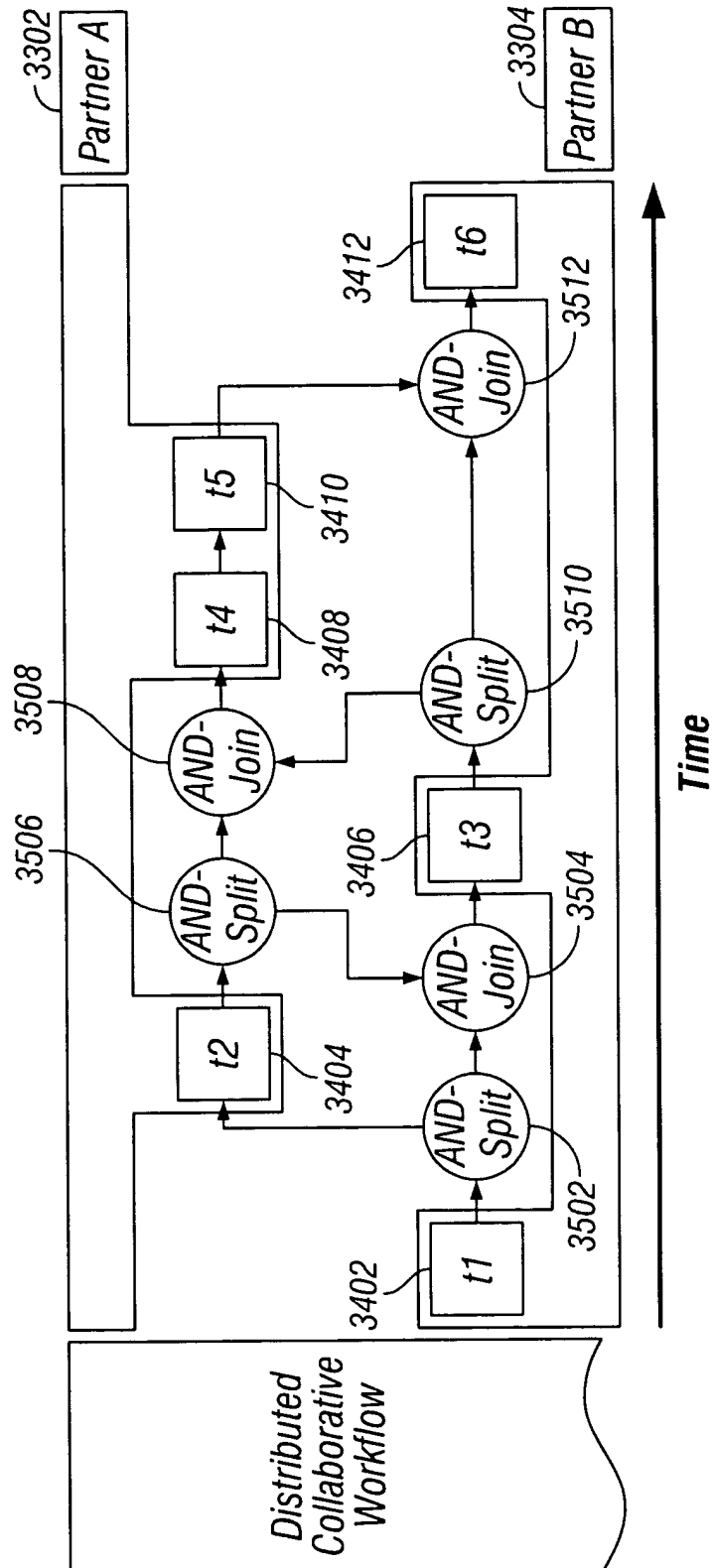


FIG. 35

34/51

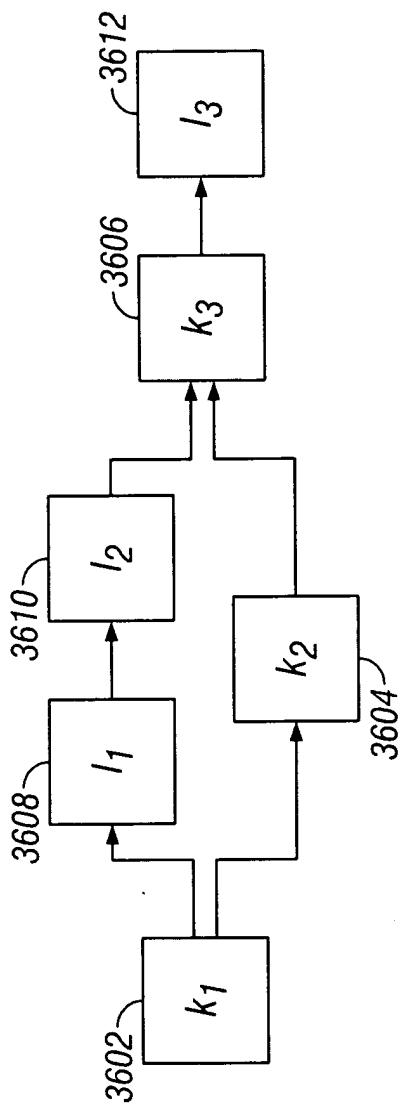


FIG. 36

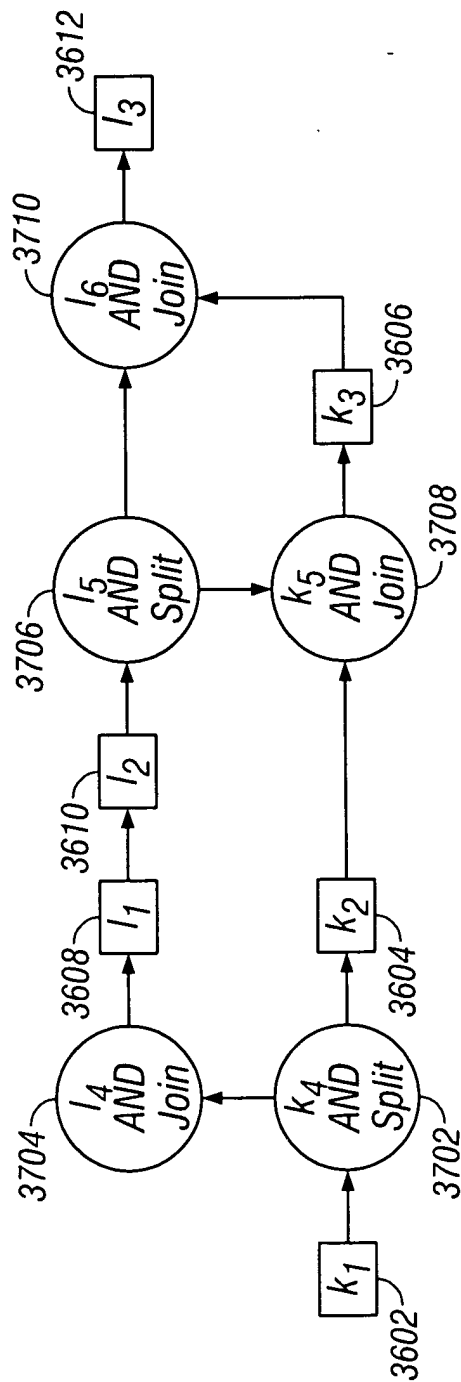


FIG. 37

35/51

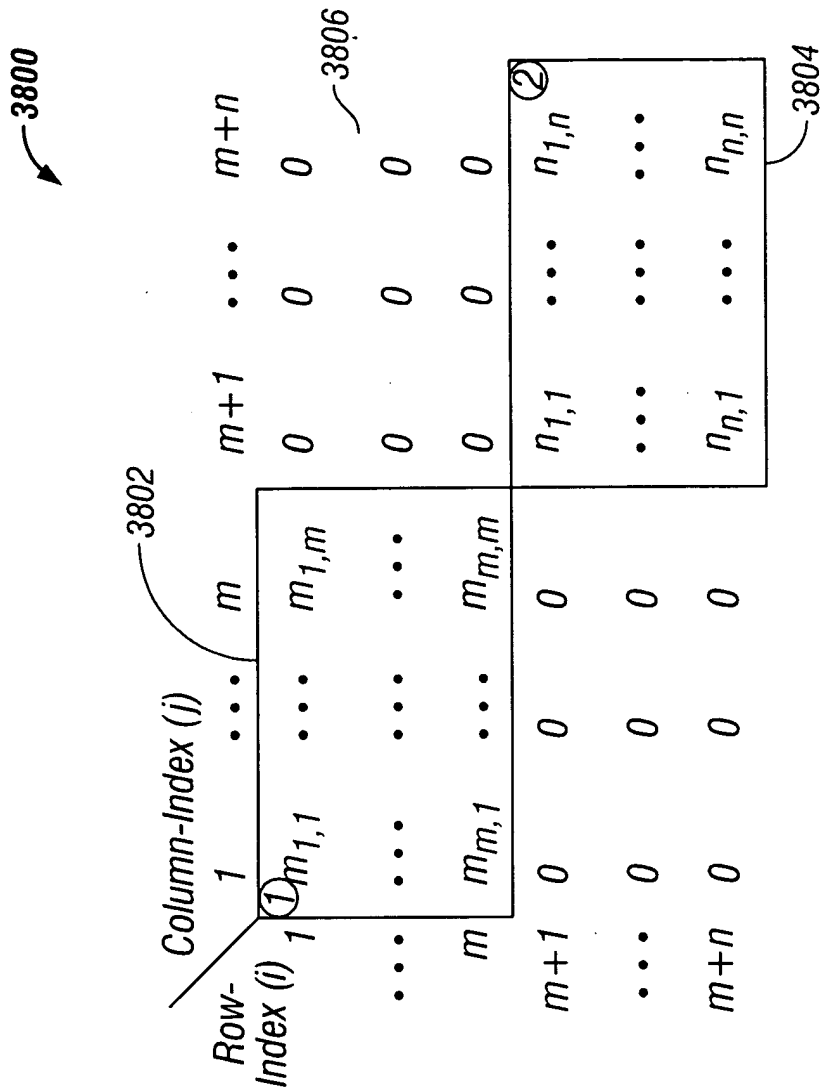


FIG. 38

36/51

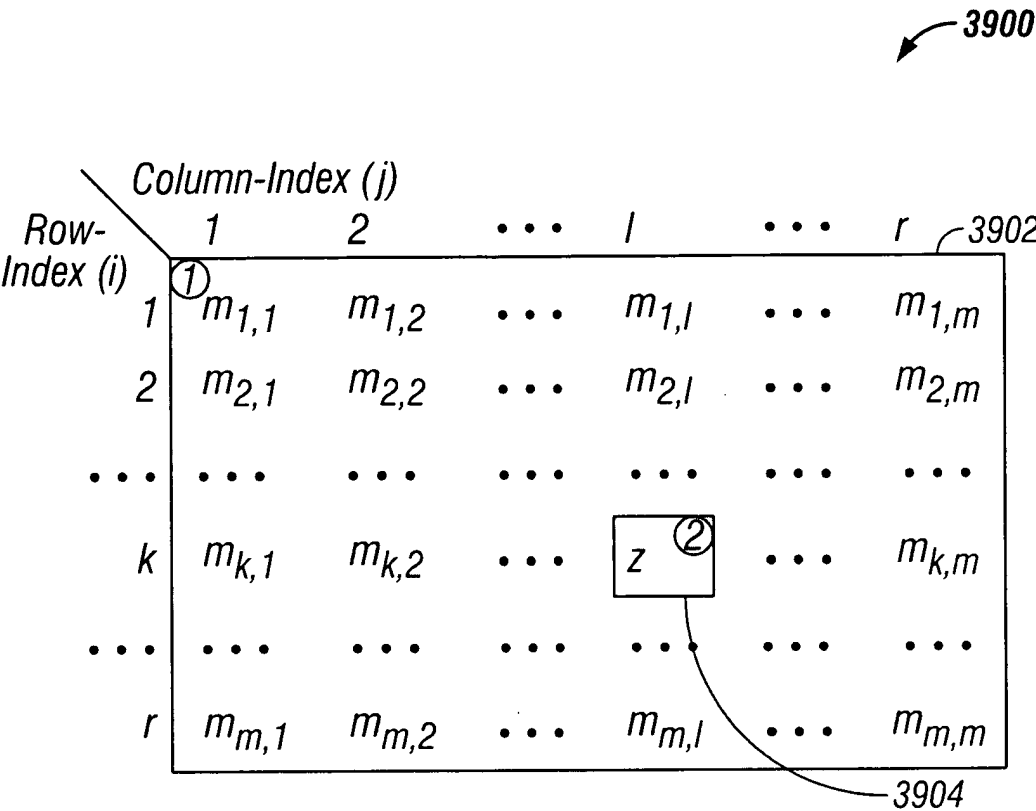


FIG. 39

Row-Index (i)	Column-Index (j)	1	2	...	k	m	r
1	1	$m_{1,1}$	$m_{1,2}$	...	0	$m_{1,m}$	$m_{1,k}$
2	2	$m_{2,1}$	$m_{2,2}$	...	0	$m_{2,m}$	$m_{2,k}$
...	...	...	...	...	0	...	...
k	k	$m_{k,1}$	$m_{k,2}$	...	0	$m_{k,m}$	$m_{k,k}$
...	...	...	...	...	0	...	...
m	m	$m_{m,1}$	$m_{m,2}$	...	0	$m_{m,m}$	$m_{m,k}$
r	r	0	0	0	1	0	0

FIG. 40

38/51

4100

Row-Index (i)	Column-Index (j)					r
	1	2	...	k	m	
1	$m_{1,1}$	$m_{1,2}$	...	$m_{1,k}$	$m_{1,m}$	0
2	$m_{2,1}$	$m_{2,2}$	...	$m_{2,k}$	$m_{2,m}$	0
...	...	...	...	...	...	0
k	0	0	0	0	0	1
...	...	...	...	...	...	0
m	$m_{m,1}$	$m_{m,2}$	...	$m_{m,k}$	$m_{m,m}$	0
r	$m_{k,1}$	$m_{k,2}$	...	$m_{k,k}$	$m_{k,m}$	0

4106

4104

FIG. 41

39/51

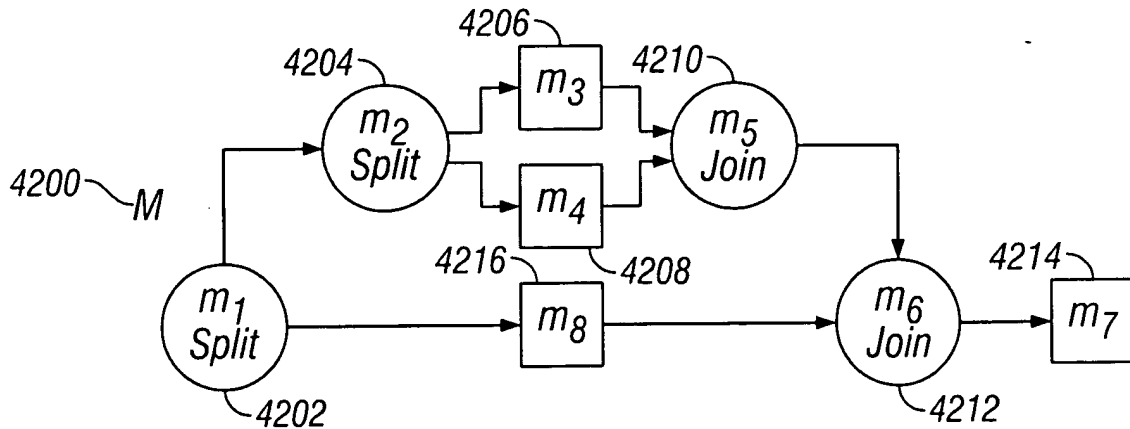


FIG. 42

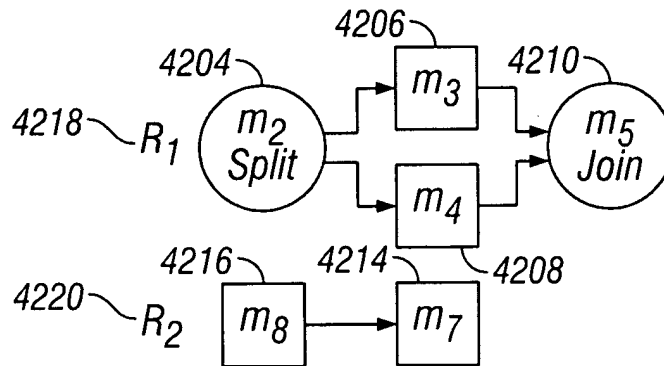


FIG. 42A

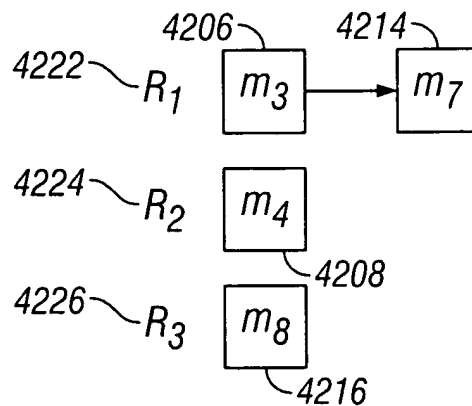


FIG. 42B

40/51

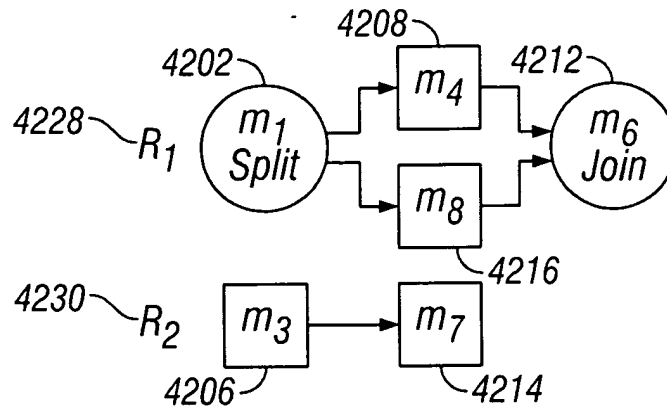


FIG. 42C

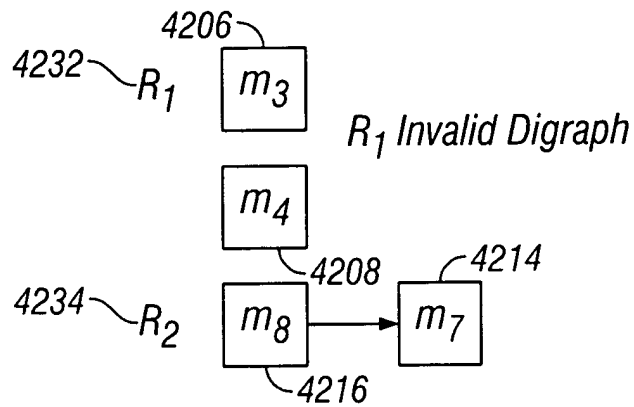


FIG. 42D

41/51

4300

Column-Index (j)		1	2	...	k-1	k	k+1	...	r
Row-Index (i)	1	$m_{1,1}$	$m_{1,2}$	...	$m_{1,k-1}$	$m_{1,k+1}$	$m_{1,k+2}$	...	$m_{1,m}$
	2	$m_{2,1}$	$m_{2,2}$	...	$m_{2,k-1}$	$m_{2,k+1}$	$m_{2,k+2}$	...	$m_{2,m}$
...
	k-1	$m_{k-1,1}$	$m_{k-1,2}$	...	$m_{k-1,k-1}$	$m_{k-1,k+1}$	$m_{k-1,k+2}$	...	$m_{k-1,m}$
k	k	$m_{k+1,1}$	$m_{k+1,2}$	...	$m_{k+1,k-1}$	$m_{k+1,k+1}$	$m_{k+1,k+2}$	...	$m_{k+1,m}$
	k+1	$m_{k+2,1}$	$m_{k+2,2}$	...	$m_{k+2,k-1}$	$m_{k+2,k+1}$	$m_{k+2,k+2}$	...	$m_{k+2,m}$
...
	r	$m_{m,1}$	$m_{m,2}$	...	$m_{m,k-1}$	$m_{m,k+1}$	$m_{m,k+2}$	...	$m_{m,m}$

4306

4308

FIG. 43

42/51

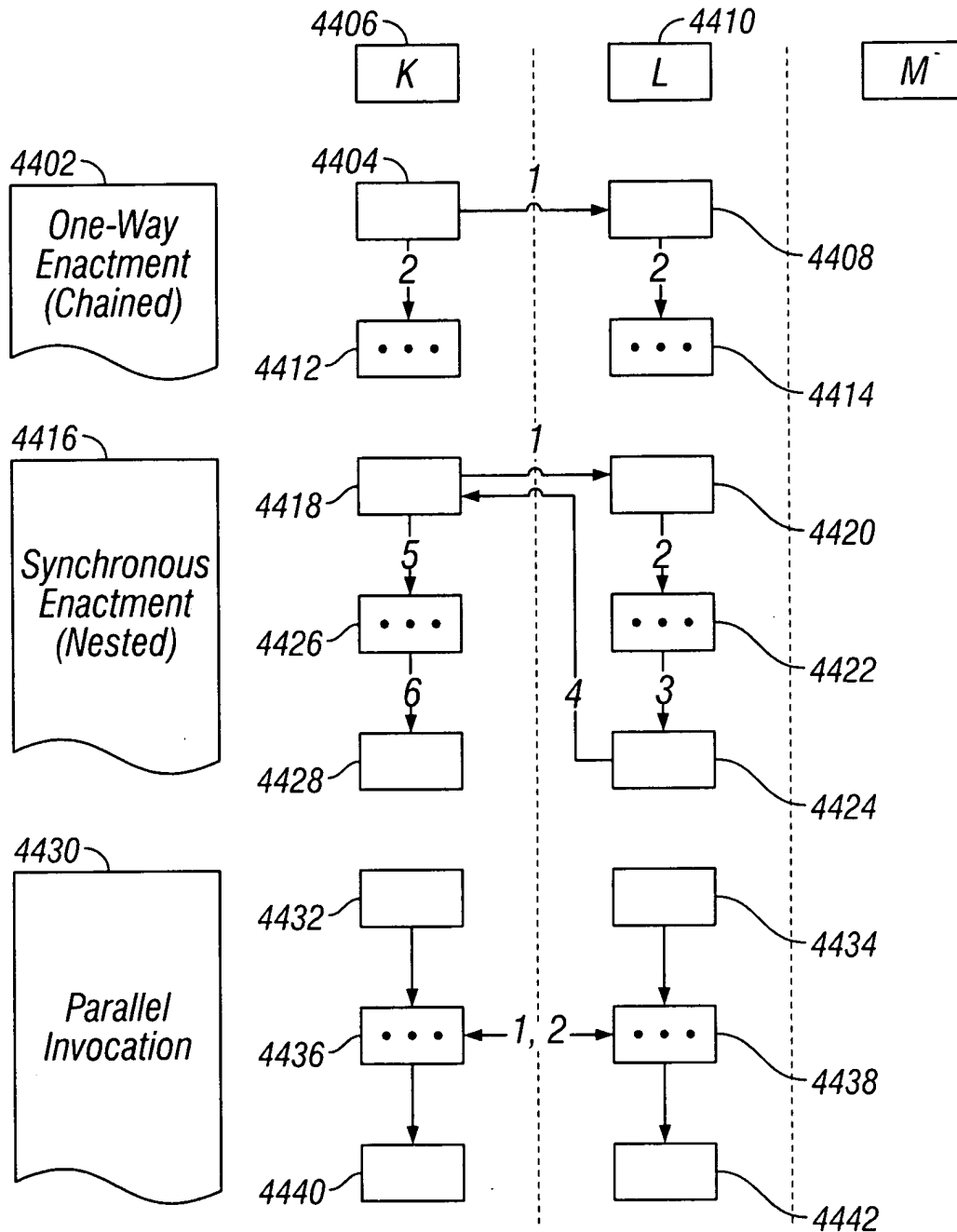


FIG. 44

43/51

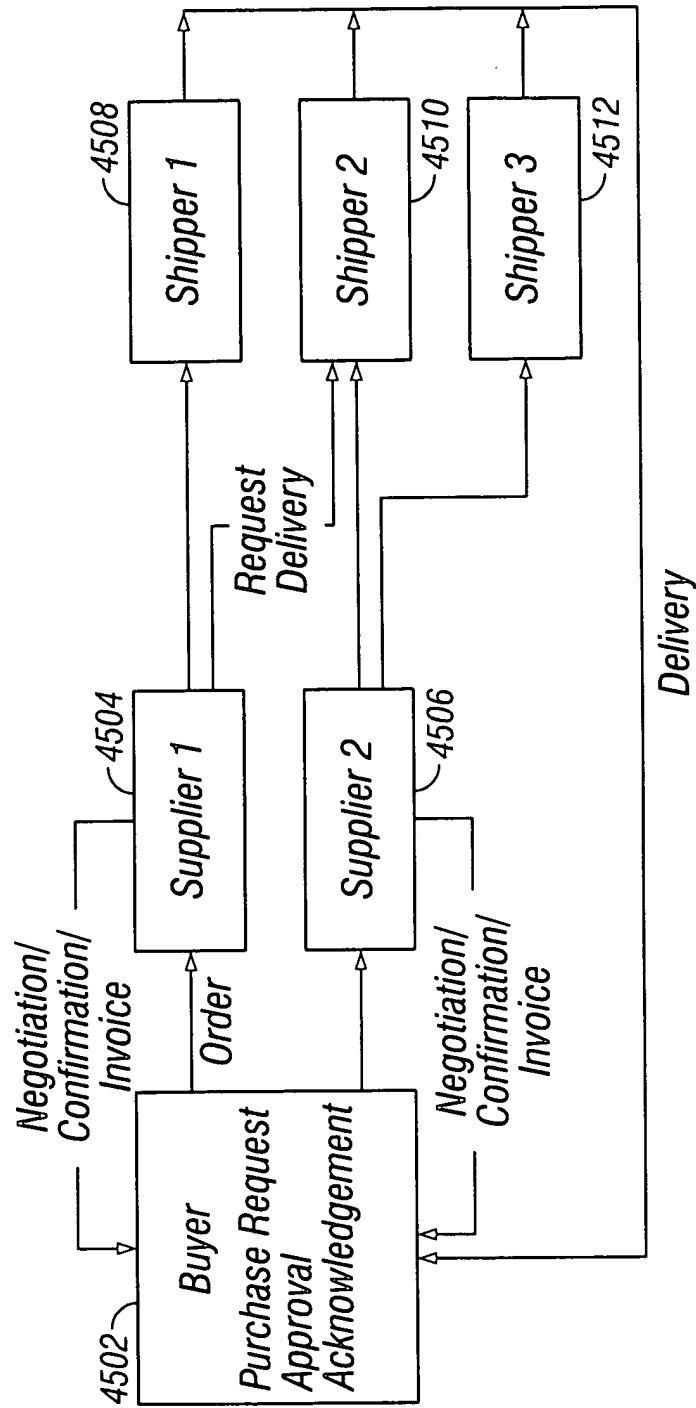


FIG. 45

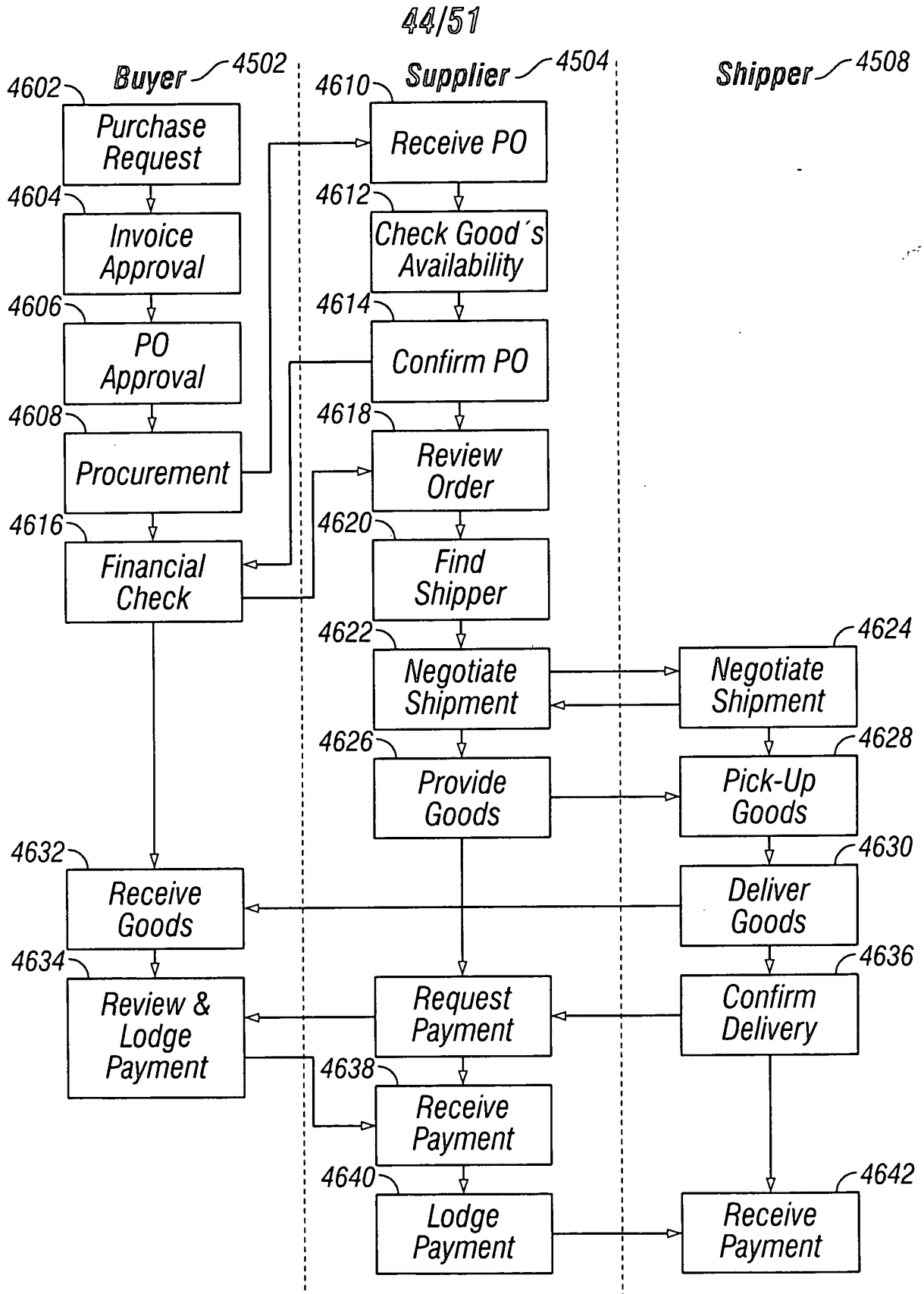


FIG. 46

45/51

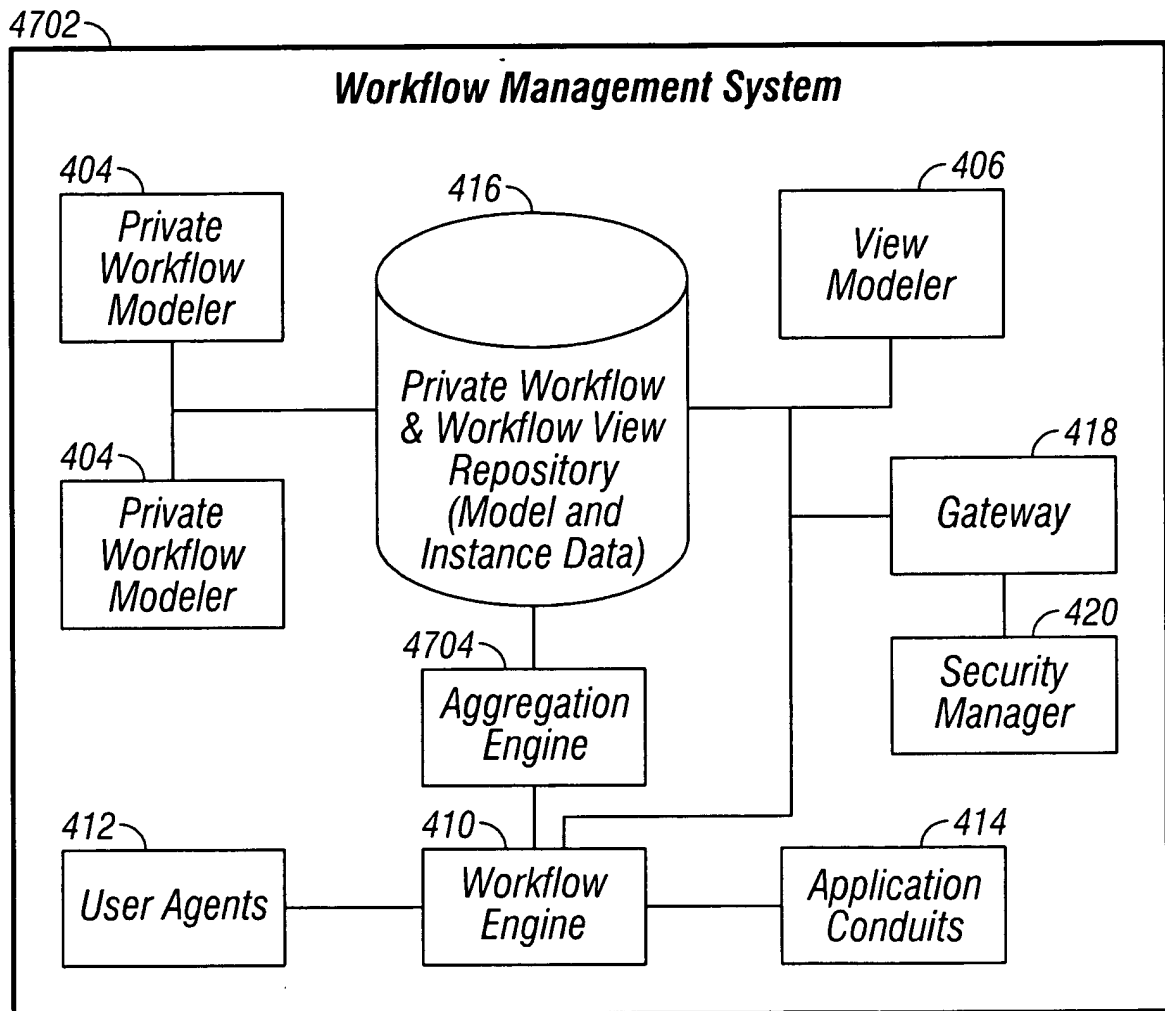


FIG. 47

46/51

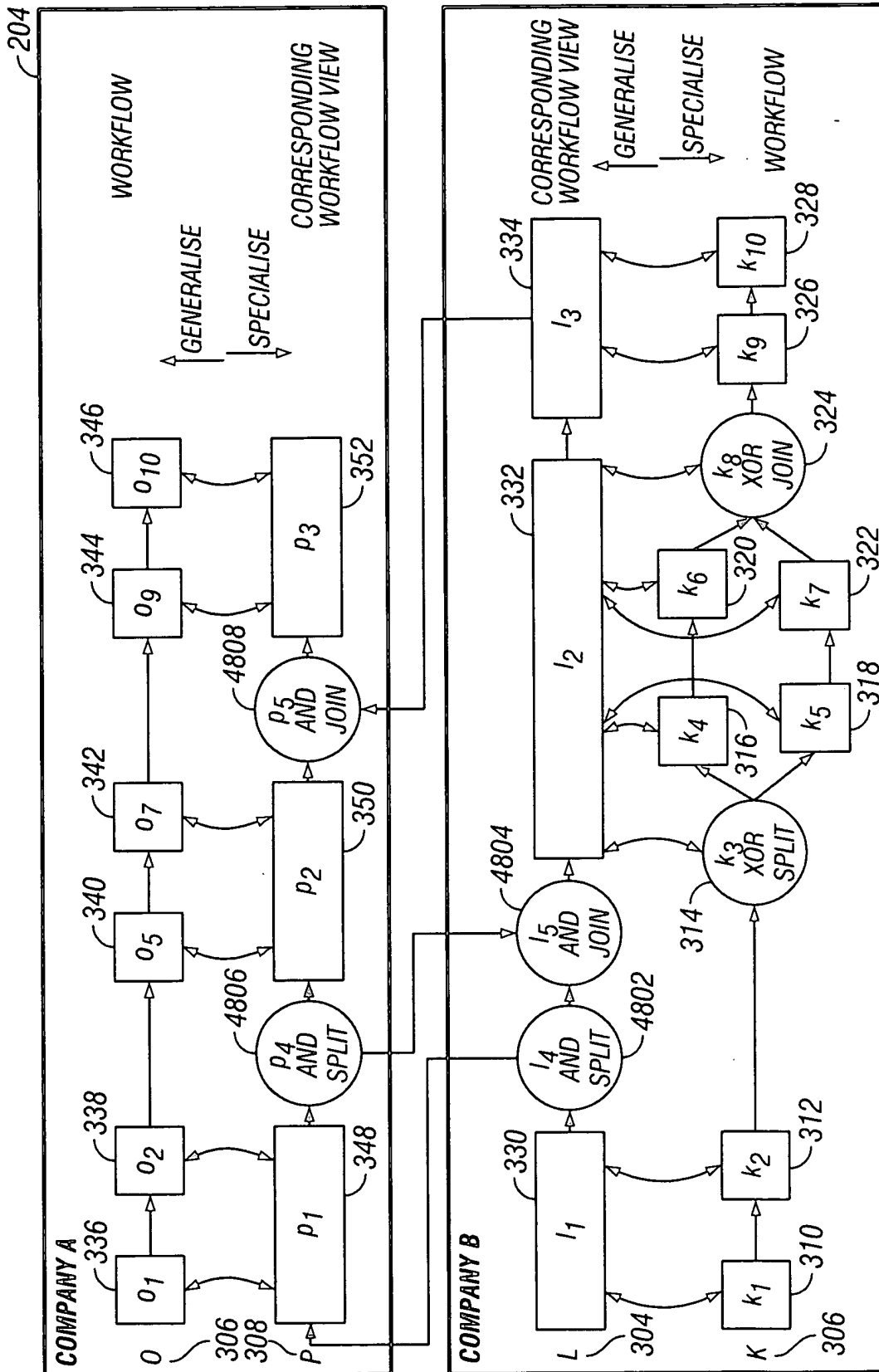


FIG. 48

47/51

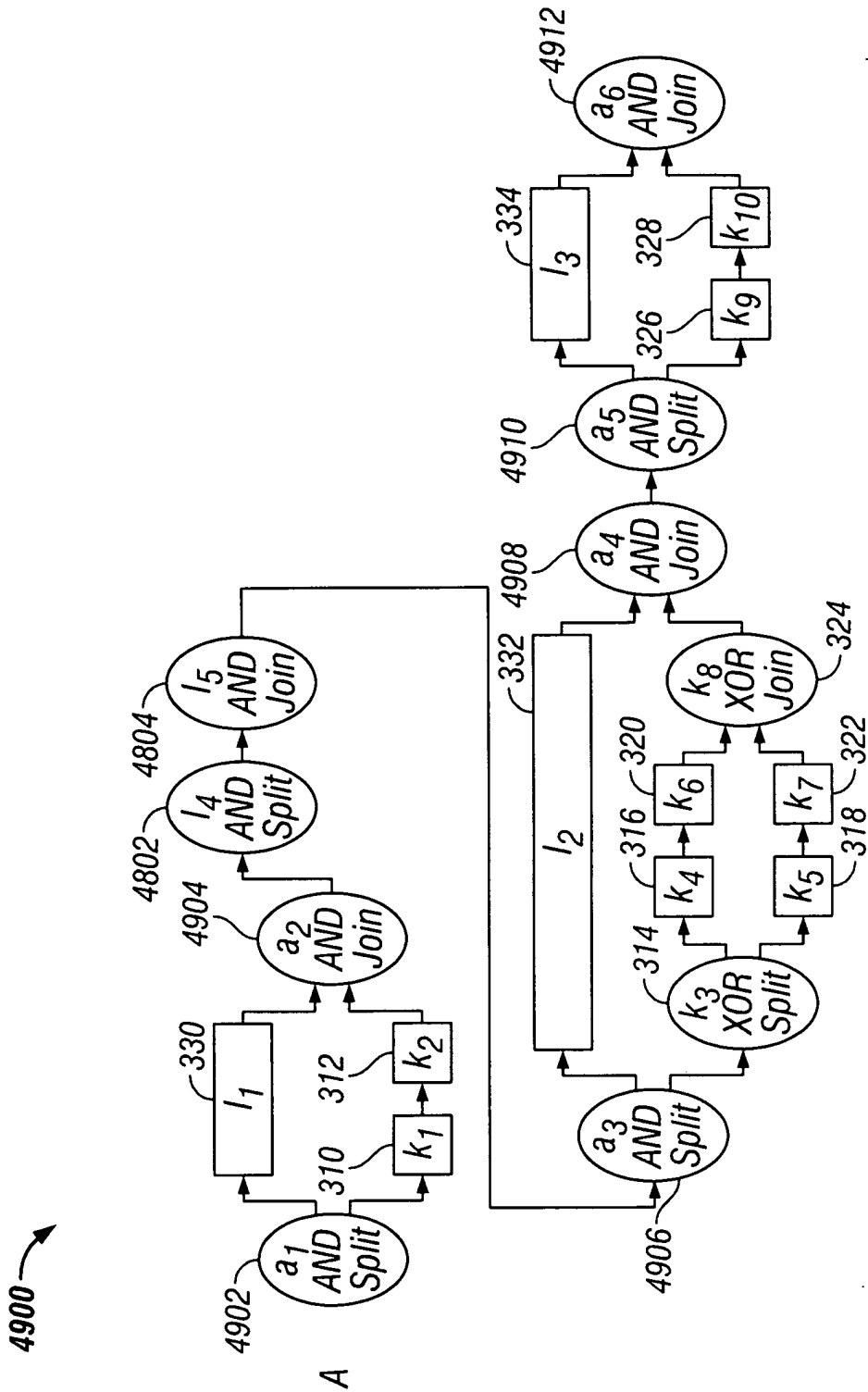


FIG. 49

48/51

5000

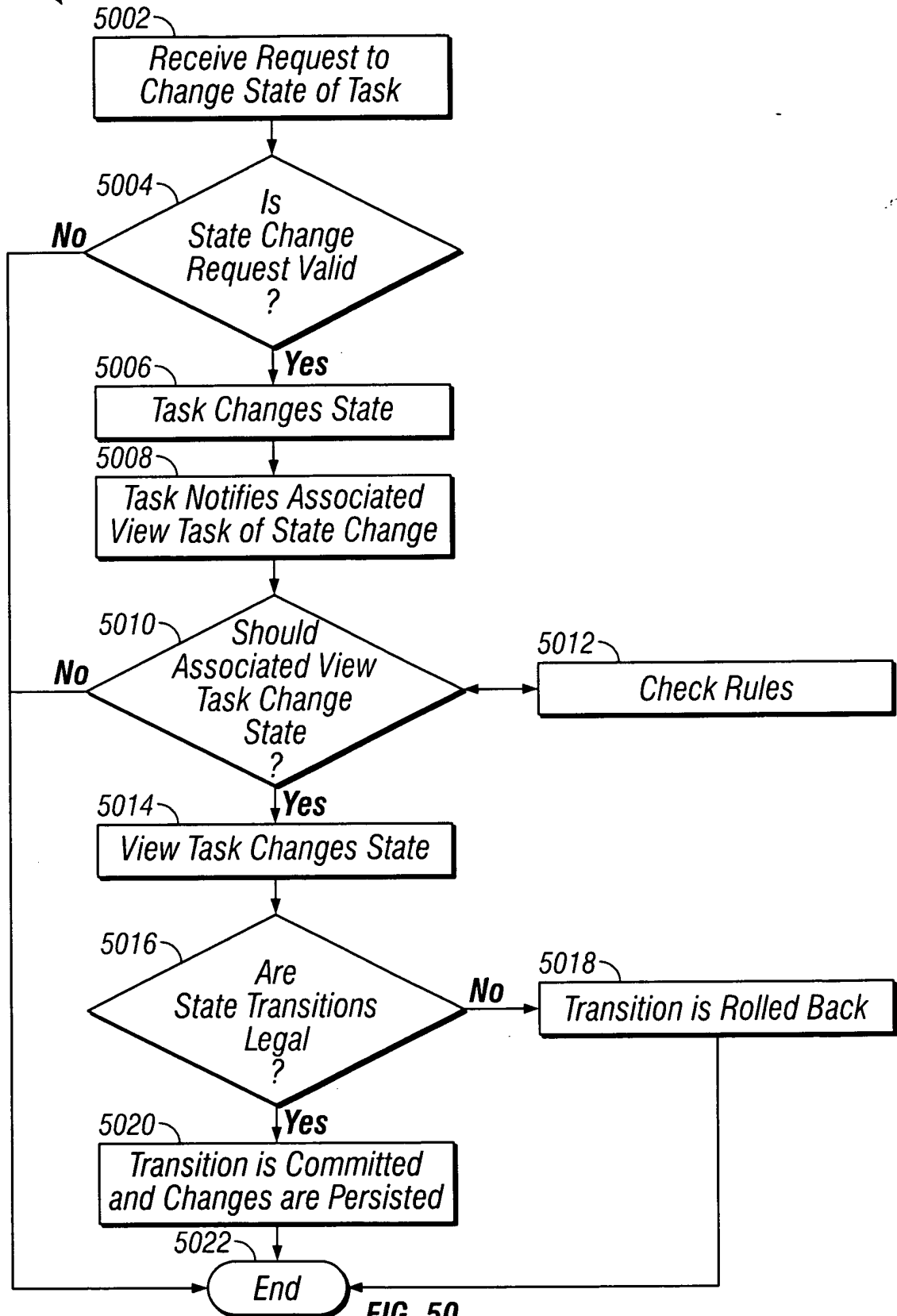


FIG. 50

49/51

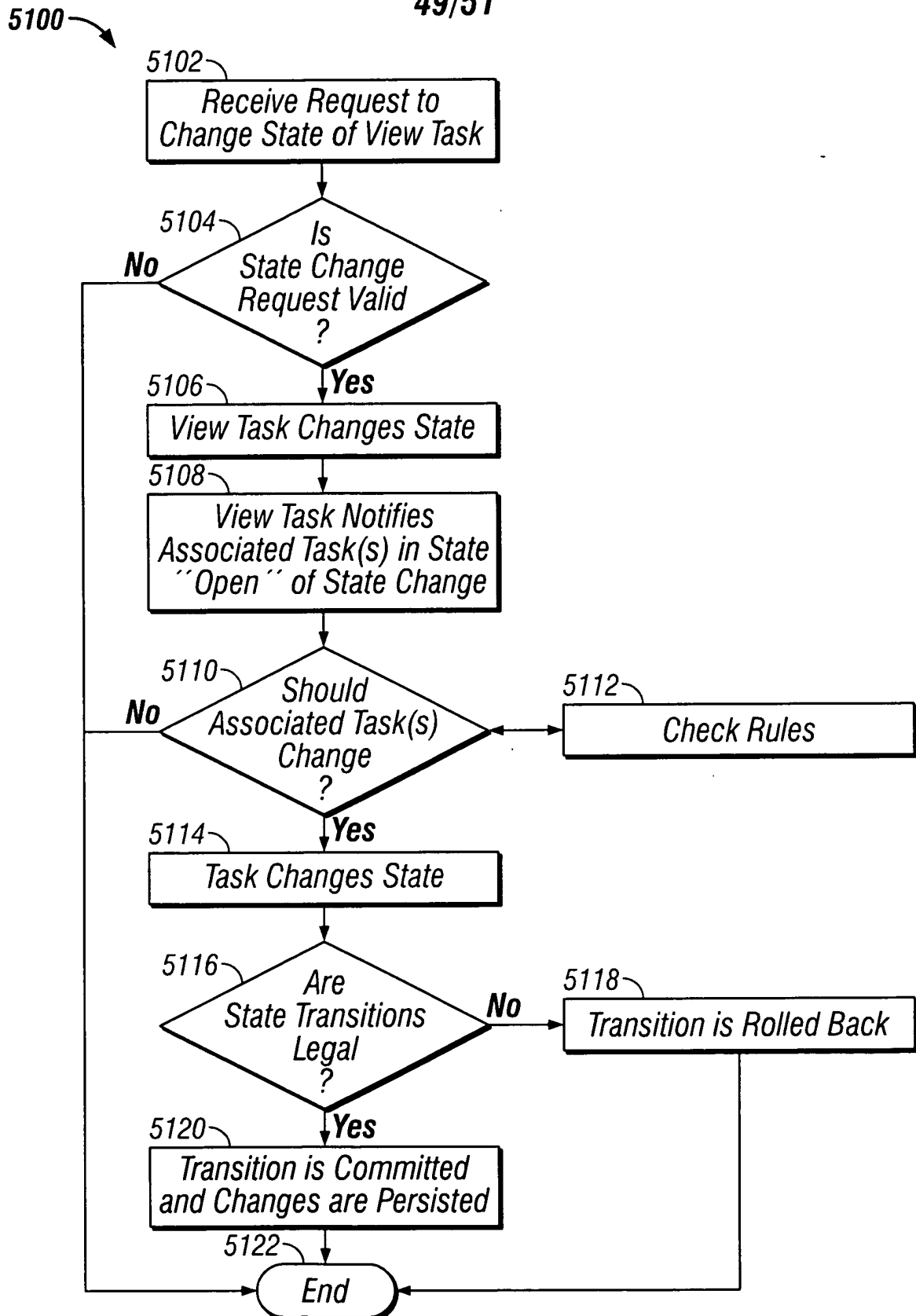


FIG. 51

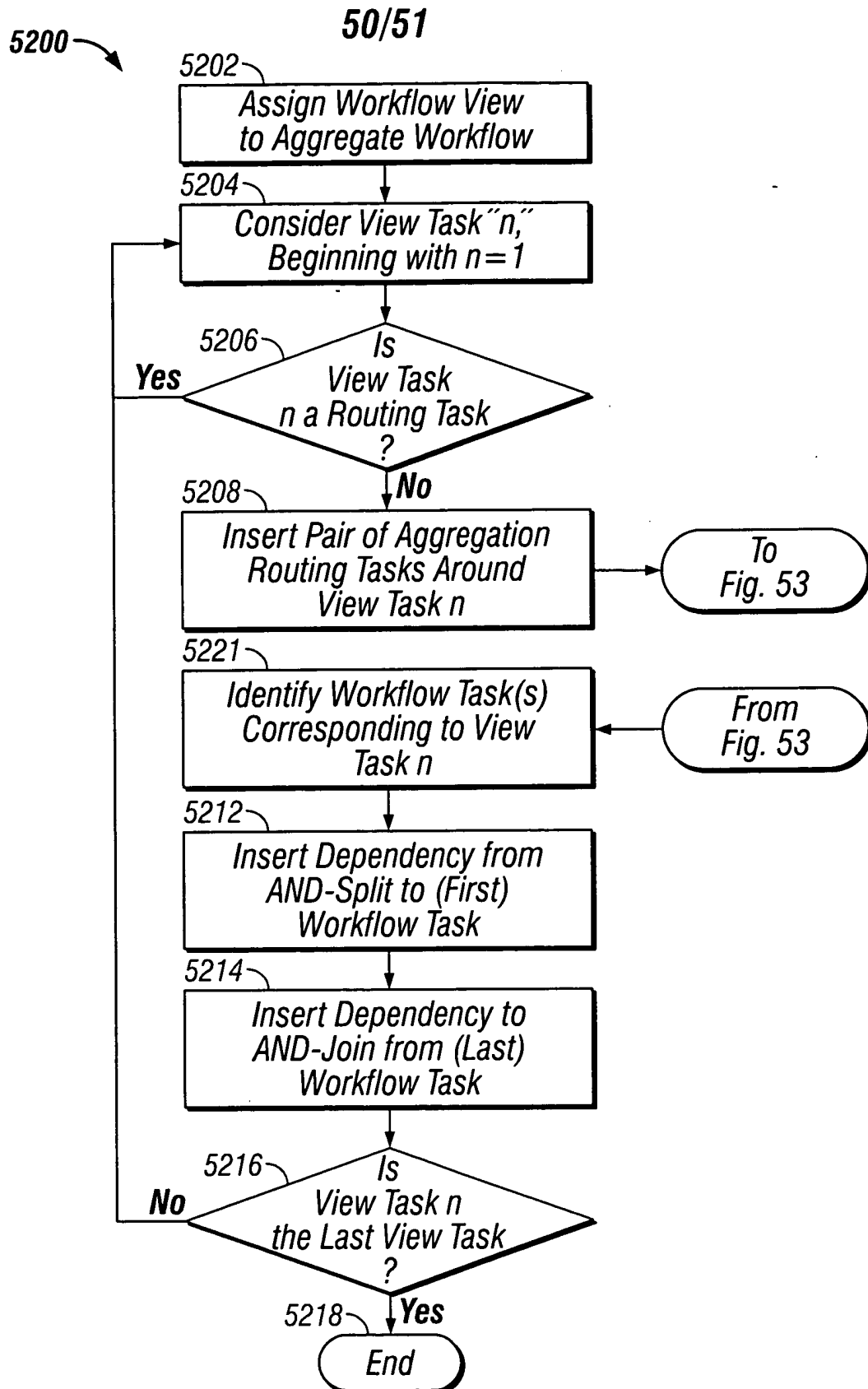


FIG. 52

51/51

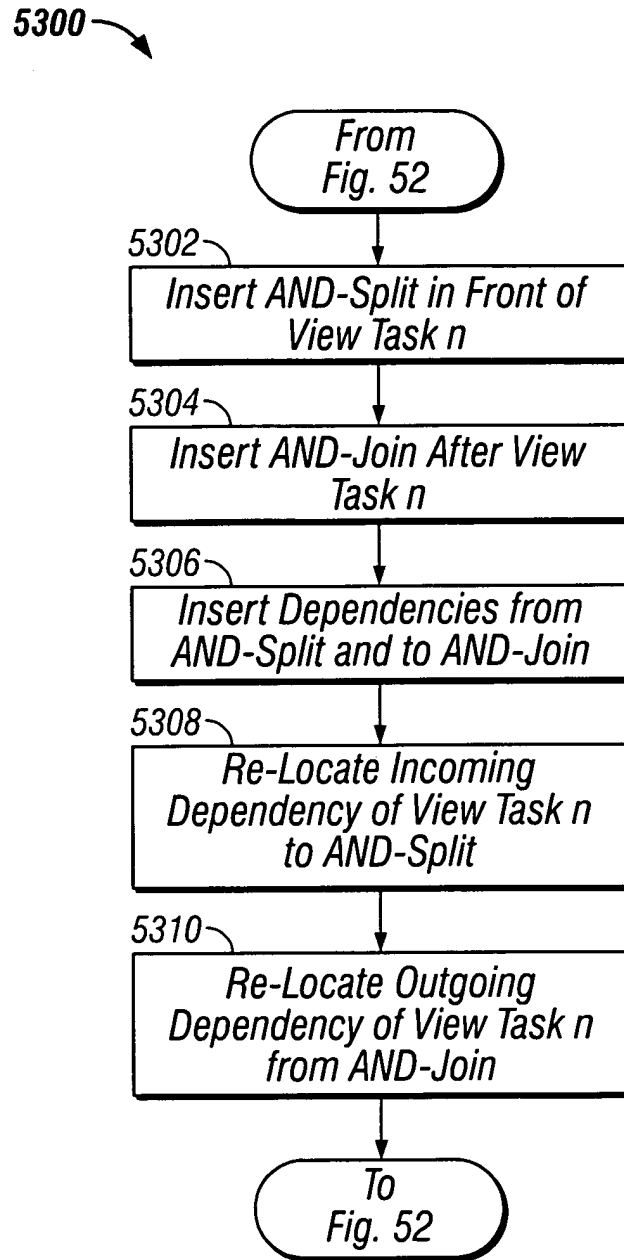


FIG. 53